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THE HOUSING GUARANTY PROGRAM OF THE AID
OFFICE OF HOUSING AND URBAN DEVELOPMENT

The world's accelerating shelter problems led the United States to develop the Housing Guaranty Program as part of its foreign assistance program in the early 1960's. This Program fosters the transfer of resources and technologies to developing countries confronting shelter and related urban problems.

In this unique AID activity, U.S. private sector lenders provide long-term financing for low-income shelter and urban upgrading programs in developing countries. The United States government underwrites these transactions through the provision of a full faith and credit guaranty.

AID charges a fee for its guaranty, which covers operating expenses and provides reserves against claims, resulting in an essentially self-sufficient program.

The Housing Guaranty Program finances a range of shelter programs, designed to benefit poor families primarily in urban areas: (1) **Slum Upgrading**, including provision of facilities for water supply, sanitation, electricity, roads, etc., as well as building materials for self-help home improvement; (2) **Sites and Services**, including preparing vacant areas for productive shelter use by surveying and platting the land, installing water and sewage lines and roads, and providing building material loans and technical assistance for self-help shelter construction; (3) **Core Housing**, based upon a Sites and Services project approach with the addition of a rudimentary housing shell on each lot (perhaps four walls, a roof, and water facilities) designed to be improved by the owner; and (4) **Low-Cost Housing** units for sale or rental. All four project types may include complementary facilities such as schools, health centers, and markets.

These types of projects are financed in the context of supporting the growth and development of national shelter policies and shelter institutions, such as national housing banks and national housing agencies.

Recently, the name of the Office of Housing has been changed to the Office of Housing and Urban Development to reflect its increased responsibilities in the area of urban development and urban research.

4th Annual International Shelter Workshop for Senior Professionals



October 25-November 19, 1982
Washington, D.C.



Office of Housing & Urban Development
Agency for International Development

SHELTER SECTOR WORKSHOP FOR SENIOR PROFESSIONALS

The rate and scale of urbanization in many countries is rapidly accelerating. More than one billion new urban citizens will need shelter, basic urban services, and productive employment by the year 2000. During recent years there has been an increasing awareness that conventional solutions and institutional systems were not successfully coping with national shelter requirements, particularly the special needs of the urban poor.

The U.S. Agency for International Development has developed a significant body of experience over the last 20 years with shelter programs in some 50 developing countries.

The AID Office of Housing and Urban Development initiated the Shelter Sector Workshop in 1979. The development of an annual workshop came in response to the need to provide a structured forum in which senior level persons involved in the various aspects of shelter in developing countries could gain knowledge of new approaches and concepts being used in the field.

OBJECTIVES

The overall objective of the workshop is to respond to the need of public and private agencies in developing countries to increase the technical expertise and administrative capabilities of their staffs in order to deal effectively with the immense problem of sheltering the urban poor. The workshop is designed to aid in the search for viable solutions to the shelter problem by providing participants with an opportunity to exchange experiences and to analyze and discuss a wide range of shelter sector issues, approaches, and methods.

PROGRAM COMPONENTS

The four-week program is designed to cover the fundamental issues affecting the provision of shelter and shelter-related services in the developing world today. Issues will be presented through lectures, group discussions, and panel presentations. Extensive use will be made of visual aids to illustrate topics under discussion, and field trips will be taken to sites in the Washington/Baltimore area.

This year the workshop will concentrate on five themes.

1. Analysis and definition of the appropriate roles of the public and private sectors. It is becoming clear that the private sector must play a significant role if shelter requirements are to be met. The private sector, including informal private housing initiatives, is dependent on public sector policies and programs. The workshop will examine the essential interrelationships between the private and public sectors.

2. Institutional and management capacities required to guide effective shelter sector programs. The need to expand institutional and management capacity is recognized as a prerequisite to successful shelter sector programming. The workshop will explore alternative institutional approaches, methods and techniques for improving management capacity.

3. Settlement upgrading programs as an alternative to slum clearance. Other shelter solutions such as sites and services and core houses will also be discussed, but the emphasis will be on settlement upgrading. Settlement upgrading consists of a bundle of related improvements in existing neighborhoods, including infrastructure improvement, as well as approaches for providing secure land tenure, home improvement loans, small scale enterprise loans, and community development activities.

4. The relationship of project and program design to individual household income affordability levels. A critical constraint in shelter sector programming and project design is the extent to which the households in a targeted group can afford the shelter solution offered. The methods and techniques for defining target group affordability and its relationship to project design will be discussed.

5. The importance of cost recovery to a self-reliant shelter sector. Cost recovery from household occupants of public sector projects has been a persistent problem for many housing agencies. The workshop will focus on the issues related to this problem and explore alternative methods and techniques being used to improve cost recovery.

The workshop will examine these five themes in depth including their inter-relationship one with another. Other more specialized topics will also be introduced during the workshop from time to time to complete the shelter sector overview.

TEAM CASE STUDY EXERCISE

Throughout the four weeks of the workshop the participants will work in small groups on a practical case study exercise. This exercise will require the development of a project brief for a sites and services or settlement upgrading program in a selected city, and an analysis of how the project relates to broader shelter sector policy issues. This year an entirely new case study is being introduced with several interesting innovations such as "role playing". Role playing will allow the participants to "represent" the various types of interests which affect decision making in real project development situations. The purpose of the case study is to bring into focus the various issues discussed in the workshop and the methods and techniques for analysis and design in a practical work situation. The case study approach also provides an opportunity for intense interaction among group members as they debate and discuss alternative approaches to practical problems and develop joint solutions.

COUNTRY PRESENTATIONS

Each country represented at the workshop will be asked to prepare a presentation on some aspect of their country's shelter sector experience. The opportunity to exchange first-hand experience has been one of the most important features of previous workshops. Presentations in the past have included the examination of specific projects, housing finance systems, national housing policies, or the programs of specific housing agencies. These presentations are usually supplemented with visual aids, slides, or movies. This year it is requested that the country presentations address one or more of the five basic themes of the workshop. Each country representative is expected to arrive at the workshop with a written paper summarizing their presentation which can be reproduced and circulated to all participants as part of their permanent records of the workshop.

PUBLICATIONS, BOOKS AND REFERENCES

Participants will be provided with papers, manuals, and publications used in the workshop. While in Washington, participants can make use of the wide range of information on the shelter sector available from libraries, finance institutions, and development organizations. Each participant will be allotted \$50 towards the purchase of books or publications of their choice. A small library of sample materials will be available in the workshop hotel.

ALUMNI NEWSLETTER

This year the Office of Housing and Urban Development has initiated a program of followup activities for past and future workshop participants. The purpose is to establish an alumni network through gatherings at Regional Conferences, distribution of an Alumni Newsletter, and selected professional papers dealing with aspects of shelter sector issues.

During the first three workshops there were 83 participants from 31 countries. It is hoped that through these followup activities this growing group of senior officials can benefit from a continuing exchange of information between themselves and with the Office of Housing and Urban Development.

WORKSHOP STAFF

PETER M. KIMM, Director of the Office of Housing and Urban Development, has led the Agency for International Development's shelter and community development program for over a decade. Mr. Kimm has lectured worldwide on housing construction, housing and community development, national housing policy and institutional development, and housing finance. He has also written widely on these subjects. **DORN C. McGRATH, JR., M.C.P., A.I.C.P.**, Chairman of the Department of Urban and Regional Planning, George Washington University, has lectured on metropolitan development at many U.S. universities and in Europe and Latin America. He has been active in the American Institute of Planners, the Urban Land Institute, and other groups interested in the urban sector and written widely on the subject. **ALFRED P. VAN HUYCK, M.R.P.**, President of PADCO, Inc., has specialized in national housing policy preparation and housing programs for lowest income people in the developing countries. He has worked on housing programs in 20 countries in Latin America, the Middle East, Africa and Asia. **EDWARD H. ROBBINS, M.U.R.P.**, Senior Vice President for International Operations, National Savings and Loan League, is a specialist in housing finance and finance institution development. He has worked extensively in Latin America and Africa. **THEODORE PRIFTIS, M.A.**, Vice President, Cooperative Housing Foundation, is an authority on the establishment and management of cooperative housing, and housing program design. He has worked in many developing countries and has special expertise on the shelter sector issues of Latin America.

GUEST SPEAKERS AND SPECIAL PARTICIPANTS will address the workshop from time to time supplementing the core faculty. The program will be organized and conducted by faculty and staff of the **GEORGE WASHINGTON UNIVERSITY, DEPARTMENT OF URBAN AND REGIONAL PLANNING**. Faculty experienced in housing and international development will be available throughout the workshop for counseling and assistance to participants.

WHO SHOULD ATTEND THE SHELTER WORKSHOP

Senior level persons who are in positions to make decisions and set policy are sought for this workshop. This professional level is essential to ensure that information exchanged at the workshop can be introduced into policy and program discussions as well as integrated into the work methods of the countries represented. Candidates can be from a wide range of professions within the shelter sector including administrators, economists, planners, architects, engineers, sociologists, finance specialists, and estate managers. Candidates can be employed by public or private sector agencies at the national, provincial or local levels.

APPLICATION PROCEDURES

The workshop will be held in Washington, DC, October 25 to November 19, 1982. It will be limited to 30 persons overall. Participating countries are invited to send two senior level officials each. Candidates must have good English conversational, reading, and writing skills because the workshop relies on extensive participant discussion in English and all written materials and presentations are in English.

Application forms can be obtained from the local USAID Mission Training Office or from the Regional RHUDO Office. Completed applications should be forwarded to the Office of Housing and Urban Development in Washington, DC, not later than August 30, 1982. Selected candidates will receive an invitation to participate from USAID, along with additional information concerning the workshop.

Scholarships may be available through some AID Missions. Inquiries should be directed to the AID training officer of your particular country.

ILLUSTRATIVE BUDGET

Tuition	\$2,500
Per Diem: \$75x29 days	2,175
Travel (will vary)	1,000
Administrative Fee	100
Books & Book Shipment	80
Miscellaneous	145
	<hr/>
	\$6,000

Approximate total will vary depending on transportation cost.

EXPRESSIONS OF INTEREST

Shelter sector agencies desiring to participate by sending one or more persons to attend the workshop are encouraged to contact their local USAID Mission or write directly to the Regional Housing and Urban Development Office (RHUDO) for their region (see list below). Application information is available on request.

Michael Lippe,
Assistant Director
RHUDO/Abidjan
c/o American Embassy
Abidjan, Ivory Coast

Pamela Hussey,
Assistant Director
RHUDO/Nairobi
c/o American Embassy
Nairobi, Kenya

Albert Votaw,
Assistant Director
RHUDO/Bangkok
c/o American Embassy
Bangkok, Thailand

Mario Pita,
Assistant Director
RHUDO/Panama City
c/o American Embassy
Panama City, Panama

David Leibson,
Assistant Director
RHUDO/Tunis
c/o American Embassy
Tunis, Tunisia

ADDITIONAL INQUIRIES CAN BE DIRECTED TO:

Viviann Pettersson,
Policy Review Officer
The Office of Housing and Urban Development
Room 626, SA-12
Agency for International Development
Washington, DC 20523

WEEKLY
PROGRAM
Week 1

4th Annual International Shelter Workshop for Senior Professionals
Office of Housing and Urban Development / Agency for International Development
October 25 - November 19, 1982 - Washington, D.C.

Rev. 10/19/82

	October 25	October 26	October 27	October 28	October 29	October 30-31
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY/SUNDAY
8:30	Bus departs for Meridian House	Walk to FHLBB Amphitheater	Walk to FHLBB Amphitheater	Walk to FHLBB Amphitheater	Walk to FHLBB Amphitheater	<u>SATURDAY:</u> Washington Area Field Trip 9:00-1:00
9:00	Faculty Counselor Meetings with Participants	Definitions & Functions of Housing VAN HUYCK	Presentation of Housing Case Study Background MCGRATH VITALE	Housing Policy VAN HUYCK	Economic Implications of Housing Policy WHEATON	
10:00	Orientation to Workshop	USAID Programs: Policies, Perspectives, Objectives	N/P #1	Lunch Time	N/P #3 CSCT	
11:00	Currency Exchange	KIMM AND STAFF				
12:00	Buffet at WIC-- Meridian House	Lunch Time	Lunch Time	N/P #2 Case Study Conf. Time	Lunch Time	Lunch at Tyson's Corner
1:00	Distribute Notebooks & Questionnaires	USAID Programs: Recap of Selected Experience (Botswana/UPCHURCH) (Honduras/CONWAY) Review of Major/Persistent Problems FREE TIME	Assignment of Roles for Case Study and Distribution of Special Materials	Perspective on U.S. Housing Issues FULLER GALE	Natural Hazards and Shelter Policy KREIMER	<u>SUNDAY:</u> Free Time (Optional visits arranged if desired) Monument Room Office M. O'BRYON 3 p.m. - 7 p.m.
2:00	FREE TIME		FREE TIME	Country Presentation (1)	Country Presentations (2)	
3:00						
4:00				FREE TIME	FREE TIME	
5:00	USAID / GWU Opening					
6:00	Reception at Meridian House	Monument Room Office T. McCARTHY	Monument Room Office S. IADAROLA	Monument Room Office C. FARVACQUE	Monument Room Office G. ARABAK	
7:00						<u>SATURDAY:</u> Halloween Party

WEEKLY
PROGRAM
Week 2

4th Annual International Shelter Workshop for Senior Professionals
Office of Housing and Urban Development / Agency for International Development
October 25 - November 19, 1982 - Washington, D.C.

Rev. 10/19/82

	November 1	November 2	November 3	November 4	November 5	November 6-7
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY/SUNDAY
8:30	Walk to Marvin Center 405	Walk to FHLBB Amphitheater	Walk to Marvin Center 405	Walk to Marvin Center 405	Walk to Marvin Center 405	<u>SATURDAY:</u> Monument Room Office T. McCARTHY 10 a.m. - 4 p.m.
9:00	Land Tenure and Policy VAN HUYCK	Housing Standards VAN HUYCK	Upgrading: Comments, Definitions and Applications RIVKIN	Sites and Services Concepts RIVKIN Sites & Services Case Example: Phillipines-- Dagat -Dagatan DEMONCHAUX N/P #7 CSCT	Qualitative Information in Shelter Analysis and Policy PEATTIE	
10:00						
11:00	N/P #4 CSCT	N/P #5 CSCT	N/P #6 CSCT		N/P #8 CSCT	
12:00	Lunch Time	Luncheon	Lunch Time	Lunch Time	Luncheon	<u>SUNDAY:</u> Monument Room Office S. IADAROLA 3 p.m. - 7 p.m.
1:00	Affordability Rivkin, M.	Speaker: Mr. R. PRATT		Country Presentations (2)	Speaker: Hon. BRUCE GOLDING	
2:00		Country Presentation (1)	Hearing	- -	Country Presentation (1)	
3:00	Techniques for Defining Target Groups		FREE TIME		-	
4:00	RIVKIN G. & M.	FREE TIME		FREE TIME	FREE TIME	
5:00	FREE TIME					
6:00	Monument Room Office M. O'BRYON	Monument Room Office S. IADAROLA	Monument Room Office T. McCARTHY	Monument Room Office C. FARVACQUE	Monument Room Office G. APABAK	
7:00						

WEEKLY
PROGRAM
Week 3

4th Annual International Shelter Workshop for Senior Professionals
Office of Housing and Urban Development / Agency for International Development
October 25 - November 19, 1982 - Washington, D.C.

Rev. 10/19/82

	November 8	November 9	November 10	November 11	November 12	November 13-14
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY/SUNDAY
8:30	Walk to FHLBB Amphitheater	Walk to FHLBB Amphitheater	Board bus at Park Central	Walk to AIA Board Room	Walk to AIA Board Room	<u>SATURDAY:</u> Monument Room Office G. ARABAK 10 a.m. - 4 p.m.
9:00	Design of Dwelling Environments CAMINOS	Project Financing HOUSE	BALTIMORE FIELD TRIP "	Management of Financial Institutions ROBBINS O'LEARY	Resource Mobilization KEEN Secondary Mortgage Markets RICKS	
10:00						
11:00	N/P #9 CSCT	N/P #10 CSCT	N/P #11 CSCT	N/P #12 CSCT	N/P #13 CSCT	
12:00	Lunch Time	Lunch Time	Lunch at Harbor Place	Lunch Time	Lunch Time	
1:00	Case Study Status Reports/ Review	Country Presentations (2)	Complete Field Trip "	Country Presentations (3) - - -	Alternative Mortgage Instruments BRADY	<u>SUNDAY:</u> Monument Room Office C. FARVACQUE 3 p.m. - 7 p.m.
2:00			-			
3:00	FREE TIME	-	"	FREE TIME		
4:00		FREE TIME	"	FREE TIME		
5:00			FREE TIME			
6:00	Monument Room Office M. O'BRYON	Monument Room Office T. McCARTHY	Monument Room Office T. McCARTHY	Monument Room Office C. FARVACQUE	Monument Room Office G. ARABAK	
7:00						

WEEKLY
PROGRAM
Week 4

4th Annual International Shelter Workshop for Senior Professionals
Office of Housing and Urban Development / Agency for International Development
October 25 - November 19, 1982 - Washington, D.C.

Rev. 10/19/82

	November 15	November 16	November 17	November 18	November 19	November 20-21
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY/SUNDAY
8:30	Walk to Marvin Center 426	Walk to Marvin Center 426	Walk to FHLBB Amphitheater	Walk to FHLBB Amphitheater	G.W.U. Lisner Hall 102	<u>SATURDAY:</u> Departures
9:00	Management Principles BROWN	Subsidies and Incentives STRUYK	Institutional & Mgt. Capacities	CASE STUDY CONCLUSIONS AND REVIEW	WORKSHOP EVALUATION SESSION	
10:00						
11:00	N/P #14 CSCT	N/P #15 CSCT	N/P #16 CSCT	N/P #17	N/P #18	
12:00	Lunch Time	Lunch Time	Lunch Time	Lunch Time	Lunch Time	
1:00	Country Presentations (2)	Country Presentation (1)		FREE TIME	FREE TIME & Departures	
2:00	-	-	Role & Programs of the World Bank HR. MADAVO			
3:00	FREE TIME	FREE TIME	FREE TIME			
4:00						
5:00						
6:00	Monument Room Office M. O'BRYON	Monument Room Office S. IADAROLA	Monument Room Office S. IADAROLA	Closing Dinner and Presentation of Certificates		
7:00						

ORGANIZATION FOR USAID SHELTER WORKSHOP PROJECT

The George Washington University
School of Government and Business Administration

Department of Urban and Regional Planning 676-7475

Professor McGrath -- Academic Director, Gen. Director, P.I.
Assistant Professor Enders -- Associate Academic Director
Mr. Richard Nathan -- Manager, Workshop Activities

Workshop Aides (Graduate Students)

Mr. Gary Arabak
Ms. Catherine Farvacque
Mrs. Sally Iadarola
Ms. Taryn McCarthy
Ms. Margaret O'Bryon

Manager, Monument Room Office

Ms. Jo Lynne Sedmak

Workshop Faculty (Dept. of U&RP)

Dr. Stephen Fuller
Dr. Dennis Gale
Dr. Alcira Kreimer

Workshop Faculty (Other Agencies/Departments)

Dr. Eugene Brady	-	Indiana University, Graduate School of Business
Dr. David Brown	-	GWU, Dept. of Public Administration
Prof. Horacio Caminos	-	MIT, Architecture
Mr. Francis Conway	-	AID, Office of Housing and Urban Development
Mr. Carl House	-	Carl House Associates, Inc.
Mr. James Keen	-	Associated Advertising
Mr. Peter Kimm	-	AID, Office of Housing and Urban Development
Prof. Jean de Monchaux	-	MIT, School of Architecture & Planning
Dr. Callisto Madavo	-	The World Bank
Mr. M. Joseph O'Leary	-	Capital City Federal Savings and Loan Assoc.
Dr. Jorge Osterling	-	Lima Case Study Consultant
Dr. Lisa Peattie	-	MIT, Dept. of Urban Studies and Planning
Dr. Bruce Ricks	-	Federal Home Loan Bank Board Advis. Comm.
Ms. Goldie Rivkin	-	Rivkin Associates
Dr. Malcolm Rivkin	-	Rivkin Associates
Mr. Edward Robbins	-	National Savings and Loan League
Ing. Rodolfo Salinas	-	AID, Peru
Dr. Raymond Struyk	-	Urban Institute
Mr. James Upchurch	-	Cooperative Housing Foundation
Mr. Alfred Van Huyck	-	PADCO
Mr. Paul Vitale	-	AID, Office of Housing and Urban Development
Dr. William Wheaton	-	MIT, Dept. of Economics and Urban Studies and Planning

Special Lecturers

The Hon. Richard Pratt	-	Chairman, U.S. Federal Home Loan Bank Board
The Hon. Bruce Golding	-	Minister of Construction, Jamaica

Participating Staff PRE/HUD

Office of the Director

Peter M. Kimm, Director
Fredrik A. Hansen, Deputy Director
David S. Olinger
Viviann G. Pettersson
Helene Kaufman
W. Neal Goodson
Richard Zenger

Office of the Assistant General Counsel

Michael G. Kitay, Assistant General Counsel
Michael J. Williams, Attorney Adviser
Barry Veret, Attorney Adviser

Operations Division

John T. Howley, Assistant Director for Operations
Sara A. Frankel, Assistant Director for the Caribbean
Peter A. Feiden
James T. Grossman
William Mann, Jr.
Paul G. Vitale
Sonia Hammam
Sean Walsh

Program Support Division

Francis Conway, Assistant Director for Program Support
Robert H. Freed
Natalie F. Hawley
Carl V. Hefley

BIOGRAPHICAL DATA

PARTICIPANTS

BOLIVIA

MARCELO MIRANDA, Advisor, USAID Mission, Bolivia.

Mr. Miranda is under contract to the USAID Mission in Bolivia to provide professional assistance to the mission in connection with low- and moderate-income housing.

CABEI

RAFAEL A. CHAVARRIA, Chief, Housing Studies and Promotion Division, Central American Bank for Economic Integration (CABEI).

For several years, Mr. Chavarria has been responsible for the formulation and review of shelter policies and programs, and for the supervision of financial and technical assistance programs for CABEI.

EL SALVADOR

COSME V. DURAN, Coordinator, Housing Program, GOES-AID, Minplan.

For a year and a half, Cosme Duran has served as coordinator of the housing program for GOES-AID. In this capacity, he is responsible for planning, directing and coordinating low-cost housing projects for the urban poor.

JUAN JOSÉ GÓMEZ, Advisor to President's Office, Urban Housing Institute.

Mr. Gomez is a technical advisor to the President of Urban Housing Institute on matters relating to land use and urban housing.

EGYPT

R. G. HABIB, Under Secretary of Housing, Giza Governorate.

As Under Secretary of Housing for the Giza Governorate, Mr. Habib has major responsibility for housing and urban development policy in Cairo.

GUATEMALA

JORGE ENRIQUE GIRON, Assistant Manager, Institute for the Promotion of Insured Mortgages.

As a Civil Engineer, Mr. Giron provides technical assistance in the creation of national housing programs, in addition to his regular administrative responsibilities.

JULIAN MARTINEZ, Subcoordinator, National and International Cooperation Unit, National Committee of Reconstruction.

As a professional Architect with the National Committee of Reconstruction, Mr. Martinez works in the design, planning and evaluation of non-governmental agency development projects. This organization mobilizes private resources to benefit low-income communities.

INDIA

JOYANTA CHATTERJEE, Branch Manager, Calcutta Office of Housing Development Finance Corporation Limited (HDFC).

Mr. Chatterjee is the overall person in charge of HDFC's operations in the Eastern and North-Eastern states of India. Housing Development Finance Corporation Limited is the only housing finance institution approved by the Government of India operating throughout the country.

V. V. THAKAR, Additional Chief Engineer, Delhi Development Authority (DDA).

Mr. Thakar worked for more than 20 years with the state government of Madhya-Pradesh in India before joining DDA, a regional development authority. He has acquired considerable professional experience in dealing with shelter sector problems in the Delhi Region.

INDONESIA

HARRY AHMAD JASA SLAWAT, Chief Building Landscaping Detail Engineering Subdivision, PERUM PERUMNAS.

Mr. Slawat is an Architect responsible for the preparation of detailed engineering studies and the evaluation of prefabricated housing projects.

JIMMY TRIESTANTO, Chief, Subdivision of Feasibility and Site Planning, Department of Public Works, PERUM PERUMNAS.

Mr. Triestanto is an experienced Engineer and Urban Planner with major responsibility for site selection, preparation of feasibility studies and site plans for housing projects in Indonesia.

JAMAICA

LESSEPT CUMMINGS, Director of Finance and Administration, Estate Development Company.

In addition to his regular administrative duties, Mr. Cummings is responsible for the preparation of his company's budget and for related financial matters. He also prepares, as required, reports for international agencies engaged in the funding of housing projects in Jamaica.

DONOVAN ANTHONY NOLAN, Chief Project Officer, Jamaica Mortgage Bank.

Mr. Nolan's principal responsibilities include the inspection of infrastructure upgrading sites for Squatter Settlements, and the preparation of progress reports on those sites for the Manager of Planning and Development, Jamaica Mortgage Bank.

PERU

LIDIA ENRIQUETA GALVEZ de SNYDER, Assistant Manager, Programming Area, National Corporation for Construction (ENACE).

Mrs. Galvez de Snyder's organization has been assigned primary responsibility for "The National Housing Plan." Her duties include all aspects of contract administration, as well as urban, architectural and investment programming for all housing projects in Peru.

PORTUGAL

JOSE ANTONIO MONTEIRO BARREIRO, Chief, Studies and Planning Department of Housing and Public Works (GEP/HOP).

In addition to managing his Department, Dr. Barreiro is responsible for the development of studies necessary to the establishment of sectorial housing and public works policies.

LUIS FERNANDO FERREIRA MARTINS, Manager, Directorate for the Promotion of Housing and Construction.

As Manager of his Department, Mr. Ferreira Martins is responsible for housing project analysis. He has extensive experience in foreign exchange operations and financial loans to the housing and construction sectors, in particular.

SRI LANKA

RATHUGAMAGE CYRIL ANTONY FERNANDO, Deputy General Manager, Rural Housing (Estates), National Housing Development Authority.

Mr. Fernando assists in the formulation of housing development policies and programs in Sri Lanka. His primary duties are concerned with post-development activities in rural housing.

ANANDA SWARNAPALA WEERASINGHE, Deputy Director (Engineering Services), Urban Development Authority.

The principal objective of Mr. Weerasinghe's agency is the implementation of urban development projects. As a Civil Engineer, Mr. Weerasinghe is directly concerned with the planning programming and implementation of infrastructure construction.

THAILAND

RUSAMEE CHAIYANANDHA, Policy and Plan Analyst, Office of Policy and Planning, National Housing Authority.

As Assistant to the Chief of the Policy and Planning Division, Mrs. Rusamee participates in the formulation and implementation of housing policy and oversees foreign loan projects.

WASANA SINSATIENPORN, Economist, Fiscal Policy Office, Ministry of Finance.

As an Economist in the Loan Operations and Policy Division, Mrs. Sinsatienporn assists in the planning, preparation and evaluation of national housing project loans.

TARADOL TAYANGKANON, Deputy Chief, Project Administration Office 4, Research and Construction Department, National Housing Authority (NHA).

Mr. Tayangkanon is a Civil Engineer responsible for the administration of government-supported housing projects, as well as ADB-financed projects.

TANZANIA

BLASI A. SELEKI, Head Town Planner, Housing Development Division, Ministry of Lands, Housing and Urban Development.

Prior to his current position, Mr. Seleki served as Chairman of his country's National Sites and Services Project. His present responsibilities include the development and coordination of housing and land policies.

ZANZIBAR

MUHAMMAD S. SULAIMAN, Assistant Minister (Principal Secretary) and Chief Executive in Land Matters, Housing and Building Construction, Ministry of Lands, Construction and Housing of Zanzibar.

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Dr. Brady is currently Professor and Chairman of the Department of Business Economics and Public Policy for the Graduate School of Business at Indiana University. He is also a private economic consultant employed by several state, federal and international agencies to advise on matters including housing in developing countries, housing starts, economic stabilization policy, mortgage markets, and economic forecasting. In 1970, Dr. Brady served as Director of the Office of International Home Finance, and as Econometrician, Office of Research and Home Finance at the Federal Home Loan Bank Board in Washington, D.C. In this capacity, he advised the Board on regulatory matters governing the international activity of all federally chartered savings and loan associations.

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Dr. Brown is well-known for his extensive overseas experience in management training. His previous experience includes a teaching assignment in Scotland and a consulting post in Pakistan, where he played a major role in establishing the National Institutes of Public Administration. He has conducted a variety of management programs for nationals of other countries and has lectured widely throughout the world. Currently, Dr. Brown is a Professor of Management in the Department of Public Administration at the George Washington University. In addition to his usual teaching responsibilities, Dr. Brown directed two programs in Organizational and Management Development for the U.S. Department of Agriculture for Developing Nations.

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Mr. Caminos has taught and practiced urban design in Latin America, Europe and the United States. At the present time, he is a professor at Massachusetts Institute of Technology. Mr. Caminos is currently conducting major research in housing, with a special emphasis on urban settlement design in developing countries. He has published widely in professional journals in Argentina, England, Japan, Canada, and the United States.

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Dr. Enders has conducted extensive research on the French planning process as a visiting Fulbright Scholar, and has participated in a training project for regional planners of the Central Tunisian Development Authority in Kasserine, Tunisia. He has served as an Assistant Professor in the Department of Urban and Regional Planning at the University of Wisconsin and has worked as a full-time planner in a number of communities in Wisconsin and California. Dr. Enders is also a member of the Board of Directors of the International Division of the American Planning Association. He presently is an Assistant Professor in the Department of Urban and Regional Planning at The George Washington University.

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Ph.D., Regional Planning, Cornell University; M.C.P., University of Mississippi; B.A., Economics, Rutgers University.

Dr. Fuller is an educator and consultant whose primary areas of expertise include quantitative methods of urban and regional analysis, urban housing and community facilities, and site selection evaluation. His special area of interest is Appalachia, an area of the southeastern United States noted for its chronic poverty and related conditions and trends. He currently holds the position of Professor in the Department of Urban and Regional Planning at The George Washington University.

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Professor Gale was visiting lecturer at the Institute for Planning Studies, University of Nottingham in England in 1981. He taught planning courses to African and British students and conferred with colleagues on development policy in several African nations. He has conducted research and written numerous publications on housing, demographic patterns and the fiscal aspects of planning policy. Recently he completed a research project on neighborhood revitalization for the U.S. Department of Housing and Urban Development and the Organization for Economic Cooperation and Development (O.E.C.D.) in Paris.

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Carl House is a Harvard-trained business manager and urban economist with experience in all aspects of management and development from engineering and marketing to social and institutional planning. His work has consistently been from the viewpoint of development economics and has often been expressed as economic and financing models for testing policy and feasibility. He has worked extensively on projects in Columbia, Maryland; Alaska; Tanzania; Colombia; and Japan, and has also worked on projects in other parts of the U.S. and in England, Greece, Nigeria, Swaziland, the Sudan, and Zambia.

Mr. House is currently President of Carl House Associates, Inc., a consulting firm which provides economic evaluation and financial planning for urban land development projects with a particular focus on the design and use of computer based systems.

James R. Keen

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Mr. Keen has had extensive experience in financial marketing programs. In his current position as President/Owner of Associated Advertising, he is actively engaged in providing a full-service marketing/advertising service for local, regional, and national clients in retail, financial and agricultural product categories. Mr. Keen's previous professional experience includes consulting on several USAID housing projects in developing countries. He recently participated in a project in Egypt to develop individual savings, home improvement and mortgage loan programs for low income nationals.

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Peter M. Kimm

Mr. Kimm is Director of the AID Office of Housing and Urban Development. He has specialized in national housing policy and housing finance in the developing world and has written and spoken widely on these subjects. He is responsible for administering the shelter programs of the U.S. Agency for International Development, including the Housing Guaranty Program. The HG Program is a major international source of financial and technical assistance for housing activities in Latin America, Africa, Asia, and the Middle East. Mr. Kimm has been responsible for its implementation for the past 16 years.

Alcira G. Kreimer

Ph.D., Environmental Planning, University of California; M.A., Architecture, University of Buenos Aires.

Dr. Kreimer is an international authority on disaster-related planning and assistance, in particular the provision of housing, infrastructure and health services to victims of natural disaster. Her other interests include housing policy and design and environmental planning. She has taught and lectured at many of this country's most prestigious universities, including the Massachusetts Institute of Technology, Stanford University, and the University of California at Berkeley, and is presently Associate Professorial Lecturer in Urban Planning at The George Washington University. In addition to her teaching responsibilities, she has been a consultant to international agencies as well as to urban governments.

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Callisto E. Madavo

Ph.D., Economics, University of Notre Dame.

Dr. Madavo joined the staff of the World Bank in 1969 and has worked on Bank assisted urban transportation and shelter projects in Asia, Africa and Latin America. Formerly the Division Chief of the East and West Africa Urban Division, he is currently Acting Assistant Director in the Urban Development Department. Dr. Madavo is also the author of several articles on urbanization.

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Professor McGrath has served as past president of the American Institute of Planners, and as member of the National Academy of Sciences, National Research Council in many capacities, including urban waterfront lands, noise control, urban transportation, and the planning process. He has served as a consultant to many U.S. cities and federal agencies, and to foreign governments as well. His many publications principally address issues of airport planning and the planning process. He is also a distinguished co-author of The Charter of Machu-Picchu

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John P. de Monchaux

B.Arch., Harvard University; B.Arch. (Hons.), University of Sydney.

Since September 1981, Mr. de Monchaux has been Dean of the School of Architecture and Planning at Massachusetts Institute of Technology, Cambridge, Massachusetts. His previous experience includes a long association with Kinhill Pty Ltd., an Australian planning and engineering consulting firm. As a Director, Chairman, and later Principal Planner, he directed much of that firm's work on programs in Australia, Europe and Southeast Asia. The projects included, among other tasks, environmental impact assessments, residential development suitability studies, policy and conservation studies, and policy planning for slum up-grading and sites and services developments.

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Mr. O'Leary serves as Senior Vice President of the Capital City Federal Savings and Loan Association in Washington. He is an expert in the field of alternate mortgage instruments. His current responsibilities include budgeting, cash flow management, financial analyses and the development of new sources of funds and income. He has had a decade of experience as a senior officer of several Washington area savings and loan associations and is a past President of the Washington Chapter, Institute of Financial Education.

Lisa Redfield Peattie

Ph.D., Social Anthropology, University of Chicago; M.A., Anthropology, University of Chicago.

Mrs. Peattie is a well-known writer and lecturer on urban problems. She has done extensive consultant work in Latin America, and has published numerous articles on her findings with respect to the urban poor in that part of the world. She is the author of The View from the Barrio, published in 1968. Mrs. Peattie is currently a professor in Urban Anthropology at Massachusetts Institute of Technology, and a staff member of Guyana Project.

R. Bruce Ricks

Ph.D., M.B.A., B.S., Business Administration, University of California, Berkeley.

Dr. Ricks is a member of the Federal Home Loan Bank Board Advisory Committee and is a consultant with special experience in mortgage financing. Dr. Ricks was the chief economist at the Federal Home Loan Bank Board. His most recent service as a National Savings and Loan League consultant has been in Honduras where, under AID sponsorship, he has worked with the Central American Bank for Economic Integration on secondary mortgage market issues.

Other language: French.

Malcolm D. Rivkin

A.B. Harvard; M.C.P., Ph.D., Massachusetts Institute of Technology

Dr. Rivkin is President of Rivkin Associates and the author of two books and numerous articles in the fields of international housing and urban development. He has been a Resident Advisor to the Government of Turkey, has represented USAID on assignments in a dozen countries, and since 1980 has been Economic Development Advisor to the Republic of Palau in Micronesia. His U.S. work deals primarily with negotiating development solutions between the private sector, government agencies, and community groups. He was a Commissioner of the Maryland National Capital Park and Planning Commission and served as Co-Director of the 1979 and 1980 Shelter Workshops.

Goldie W. Rivkin

A.B. Radcliffe; M.C.P. Harvard.

Ms. Rivkin is Vice President of Rivkin Associates and an Adjunct Professor at the American University. She is co-author of a recently completed book on Approaches to Planning for Secondary Cities in Developing Countries. For USAID she has directed field missions on shelter assessment in Swaziland and Botswana, and technical assistance for upgrading programs in Peru. Her U.S. work deals primarily with market analyses of housing and commercial projects and with siting and impact studies for major public facilities. She has been a member of the faculty in the 1979 and 1980 Shelter Workshops and at Middle East Technical University. Ms. Rivkin is a past President of the Harvard Graduate School of Design Association.

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Mr. Robbins is Senior Vice President for International Operations, National Savings and Loan League, Washington, D.C. In this capacity, he is responsible for managing contracts with the Office of Housing and Urban Development, AID, and for directing institutional, financial and social analysis required in development of Housing Guaranty projects throughout the developing world. Mr. Robbins recently participated in a series of meetings focusing on the condition of housing finance systems in Latin America, particularly the role of the U.S. Savings and Loan industry in the development of primary and secondary mortgage markets and thrift systems in the developing world.

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K. C. Sivaramakrishnan

Mr. Sivaramakrishnan, an Indian national, was educated at Loyola College, Madras University, where he received a B.A. with honors in Economics and Politics in 1955 and a B.L. at the Law College in 1958. Later that year, he joined the Indian Administrative Service. In 1963, after a spell of magisterial and administrative work in the districts of W. Bengal province, he shifted to the urban field. He was Director of the Asamsol Planning Organization, engaged in preparing a regional development for a mining and industrial conurbation. Later, he was Chief Executive Officer of the Durgapur (a new town) Development Authority. In 1970, he became Secretary of the Calcutta Metropolitan Development Authority where he was responsible for implementing a multi-sectoral development program in metropolitan Calcutta. During 1976/77, a Homi Bhabha Fellow and visiting Professor at the Indian Institute of Management, Calcutta, he was engaged in writing a book on New Towns in India and directing a comparative study on the organizational framework for metropolitan development in Calcutta, Bombay, Madras and New Delhi.

Mr. Sivaramakrishnan was a Parvin Fellow at the Woodrow Wilson School of Public and International Affairs, Princeton University during 1964/65 where he participated in an urban affairs program. He has contributed frequently to journals and has lectured at several universities in India, USA and Canada. He has also been a consultant with the EDI, the UN, the Asian Development Institute, etc.

Mr. Sivaramakrishnan joined the Economic Development Institute of the World Bank in July 1977. After organizing and teaching the Institute's Urban Management and Small Enterprise courses, he moved to the Bank's Urban Development Department where he has been serving as Urban Management Advisor since September, 1981.

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Dr. Struyk has extensive policy formulation and analysis experience, having spent 27 months as the Deputy Assistant Secretary for Research at the U.S. Department of Housing and Urban Development (HUD). In that capacity, Dr. Struyk had major responsibility for the majority of research programs sponsored by that department. Prior to joining HUD, Dr. Struyk served as a consultant to the Federal Republic of Germany, and through the World Bank, the Republic of Korea and the Republic of the Philippines. Dr. Struyk is currently Program Director, Households and Housing Assistance Research, Urban Institute, Washington, D.C.

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Mr. Van Huyck, President of PADCO, is an urban planner specializing in low-cost housing. He worked in Indonesia as the PADCO team leader for advisory services to PERUMNAS (the National Urban Development Corporation); as advisor to the Kabupaten Provincial Planning and Management Training Project; as advisor to the Northern Sumatra Regional Planning Study; and as advisor to the Medan Urban Project. He served as PADCO's project director for the African Development Bank housing feasibility study; the Arusha, Tanzania master plan; the study to prepare recommendations for the national low-income housing strategy in Tanzania; the study of the Moroccan bidonville problem; and for the Jordan Valley settlement planning project. He has participated in PADCO's work in Karachi, Turkey, Kenya, Uganda, Jamaica and Ecuador, and he has served as a consultant on national housing policies for Egypt, Taiwan, and Korea. He was formerly the chief consultant for urban renewal in Calcutta, India, for the Ford Foundation. Mr. Van Huyck authored Planning for Sites and Service Programs and coauthored The Citizen's Guide to Urban Renewal and Guidelines for Establishing and Administering Land Development Agencies in the Developing Countries. He also coedited Urban Planning in the Developing Countries.

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Dr. Wheaton has published and lectured widely on a variety of urban issues. He is the author of Interregional Movements and Regional Growth, Urban Institute, Washington, D.C. (1980), and of numerous articles on subjects ranging from transportation planning to housing policies in developing countries.

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conversion table

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
in.	inches	2.54	centimeters	cm
ft.	feet	.30	centimeters	cm
yd.	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
AREA				
in ²	square inches	6.5	sq centimeters	cm ²
ft ²	square feet	0.09	square meters	m ²
yd ²	square yards	0.8	square meters	m ²
mi ²	square miles	2.6	sq kilometers	km ²
	acres	0.4	hectares	ha
cm ²	sq centimeters	0.16	square inches	in ²
m ²	square meters	1.2	square yards	yd ²
km ²	sq kilometers	0.4	square miles	mi ²
ha	hectares (10,000m ²)	2.5	acres	
MASS (WGT.)				
oz.	ounces	28	grams	g
lb.	pounds	0.45	kilograms	kg
	short tons (2000 lbs.)	0.9	tonnes	t
	long tons (2240 lbs.)	1.01	tonnes	t
g	grams	0.035	ounce	oz.
kg	kilograms	2.2	pounds	lb
t	tonnes (1000kg)	1.1	short tons	
t	tonnes (1000kg)	0.98	long tons	
VOLUME				
tsp.	teaspoons	5	milliliters	ml
tbsp.	tablespoons	15	milliliters	ml
fl. oz.	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt.	pints	0.47	liters	l
qt.	quarts	0.95	liters	l
gal.	gallons (U.S.)	3.8	liters	l
gal.	gallons (Imp)	4.5	liters	l
ft ³	cubic feet	.028	cubic meters	m ³
yd ³	cubic yards	0.76	cubic meters	m ³
ml	milliliters	0.03	fluid ounces	fl. oz.
l	liters	2.1	pints	pt.
l	liters	1.06	quarts	qt.
l	liters	0.26	gallons (U.S.)	gal (U.S.)
l	liters	0.22	gallons (Imp)	gal (Imp)
m ³	cubic meters	.35	cubic feet	ft ³
m ³	cubic meters	1.3	cubic yards	yd ³

TEMPERATURE

$$^{\circ}\text{C} = (^{\circ}\text{F} - 32) \times .555$$

$$^{\circ}\text{F} = (^{\circ}\text{C} \times 1.8) + 32$$

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HOUSING CHARACTERISTICS AND TRENDS
IN THE UNITED STATES

By

Dr. Stephen S. Fuller
Professor of Urban & Regional Planning
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and

Dr. Dennis E. Gale
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HOUSING CHARACTERISTICS AND TRENDS IN THE UNITED STATES

INTRODUCTION

The housing sector in the United States is complex as it represents both a stock and a flow. Its importance is illustrated by its accumulated value, \$3,891 billion in 1980, as well as by the value of new housing construction annually (\$47.156 billion in 1980). Yet, as large and important as the housing sector is, its performance is affected by many external forces, some economic and some non-economic. The housing sector is unique in its interdependence of private and public sector functions. The supply of and demand for, housing reflects this relationship between the producers of housing services and government control affecting the standards to which houses are built, the legal framework in which houses are bought and sold or are rented, and the supply and cost of mortgage money required for the sale and resale of houses. This paper describes the housing supply conditions and demand characteristics in the U.S. and the trends in the housing sector during the last decade. It also explores the nature of the homebuilding industry and the costs of producing and buying housing with this latter discussion including an overview of the housing finance system and recent trends in mortgage instruments and interest rates.

I. MARKET CONDITIONS

This section will examine housing market conditions in the United States, drawing on statistics from the 1970 and 1980 decennial U.S. censuses, the Annual Housing Surveys and other federal government sources. First, the characteristics of the national housing supply will be discussed. Secondly, the nature and extent of demand for housing will be explored.

Housing Supply

Between 1970 and 1980 the total U.S. housing supply increased from 68.7 million to 88.4 million dwelling units, a growth of 19.7 million units (+29%) in 10 years. Of the 88.4 million units in 1980, about 60 percent were units which were occupied by their owners on a year-round basis and 31 percent were units occupied by renters year-round. The remainder were vacant or occupied only part of the year.

In 1979, the most recent year for which more detailed statistics are available, 57.3 million units (68%) were in single-family structures; 23.7 million units (29%) were in multi-family structures. The median number of rooms per dwelling was 5.1, slightly higher than in 1970. Owner-occupied units tend to have higher levels of occupancy than renter units; in 1979 the median number of persons per unit in owner-occupied units was 2.6 whereas the median for renters was 2.0. Dramatic progress has been made in reducing the number of units of housing lacking some or all plumbing facilities. The number declined from 4.4 million in 1970 (6%) to 2.9 million in 1979 (3%).

As of 1980 low-rent publicly owned housing accounted for slightly less than 1.4 million units. This was less than 2 percent of all year-round housing units in the United States. Between 1970 and 1980 the total number of these units increased by 229,000 or an average of less than 23,000 each year.

The number of new housing units on which construction was started between 1970 and 1980 has fluctuated dramatically from a low of almost 1.2 million units in 1975 to a high of 2.4 million in 1972. In 1980 about 1.3 million units were started, a figure which reflects the decline in the rate of housing construction since the early 1970's. Of these units 98 percent were privately owned and less than two percent, publicly owned. Approximately 65 percent were single-family dwellings.

One form of housing which increased drastically in the last decade is the condominium. Generally, condominiums are units in multi-family buildings. Each unit is owned by its occupant. (In some cases the unit will be purchased by someone who does not occupy it but instead, rents it to a tenant.) In any case, condominium buildings are different from conventional apartment buildings in that each unit is separately owned in the former. In the latter, the entire building is owned by a single landlord and units are rented to tenants.

Between 1970 and 1979 more than 328,000 apartment units were converted to condominiums. Sixty-nine percent of these were converted in the two-year period 1977-79. Sixty-two percent were located in only twelve metropolitan areas of the United States. In addition, it is estimated that between 1972 and 1979 about 1.2 million new condominium units were constructed. The conversion of rental apartment buildings to condominiums has reduced the total supply of private rental housing in the United States. About 1.31 percent of all rental units in the United States were converted to condominiums between 1970 and 1979.

Another source of net housing growth has been the mobile home. These are units manufactured on industrial assembly lines. They are transported on wheels to a site and connected to sewer and water facilities. Mobile homes are one of the most inexpensive forms of shelter in the United States. In

1979 there were 3.6 million units of mobile homes, an increase of 1.5 million units (74%) since 1970. Yet, they represented only about 4.3 percent of the total U.S. housing stock in 1979.

Housing Demand

While the housing supply grew by 19.7 million units between 1970 and 1980. The nation's population increased from 204.3 million to 227 million people. This represented a gain of almost 22.7 million people (11%). But the United States' growth in households is a more useful indicator of the demand for housing. A household is defined by the U.S. Census Bureau as comprising all persons who occupy a housing unit. It includes families (individuals related by blood or marriage), single person and unrelated persons who share a housing unit. Anyone not living in a household is considered to be residing in group quarters (e.g. hospitals, jails, military barracks, rooming houses, college dormitories).

The number of households in the U.S. rose from 63.5 million in 1970 to 79.1 million in 1980. This was an increase of about 15.6 million households (25%). Thus, while population grew by 11 percent, households grew at more than twice that rate. This suggests that the population was dividing itself into smaller but more numerous households. Indeed, the data indicate that while the average household size in 1970 was 3.24 persons, in 1980 it had declined to 2.75 persons.

The fairly substantial growth in households over the past decade raises the question whether most of the gain occurred among family (related persons) or non-family households (unrelated persons).

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Family and Nonfamily Households, 1970-1980

	<u>1970</u>	<u>1980</u>	<u>% change 1970-1980</u>
Family	51,456,000	58,426,000	13.5
Nonfamily	11,945,000	20,682,000	73.1
Total	63,401,000	79,108,000	24.8

Source: Statistical Abstract of the United States, 1981. Table 60, p.42.

By far, the greatest gain in households was among nonfamily households. The rate of growth for these households was more than five times that of family households. Most of the increase among nonfamily households occurred in one-person households, which rose by 6.7 million (60%). But proportionally, the largest gains occurred among two- (133%) and three-person (72%) households, although their numbers were smaller than those of one-person households. Two-person households composed of an unmarried male and female rose by 247 percent, showing another source of growth in smaller households.

Also related to the changing demand for housing was the relationship between growth in households and in housing units. While the nation gained 19.7 million housing units (29%) in the 1970-1980 period, it grew by 15.6 million households (25%). Therefore, the past decade was a period during which the housing supply was growing at a faster rate than the apparent demand for housing. One result, as indicated above, was that on the average, housing units had lower levels of occupancy and extent of overcrowded units declined.

Nevertheless, there are significant differences in the United States between subgroups in the population. For example, black households tend to be larger on the average than white households. Although average household size declined from 1970 to 1980 at about the same rate for both groups, black households still had larger average size (3.67 persons) than whites

(3.22 persons) in 1980. Similarly, black households in 1980 were more likely to have a lower household income and a higher rate of unemployment than whites. These and other indicators help to account for the fact that proportionally more blacks than whites are poorly housed. Other subgroups such as families headed by females and persons over age 65 are also likely to have less satisfactory housing conditions than most other subgroups.

There are important differences as well, between homeowners and renters in the United States. About one-fourth (24%) of all owner-occupied housing units have an annual household income of under \$10,000 while one-half (50%) of renter occupied units have such income levels. On the other hand, 31 percent of owner-occupied units have incomes of \$25,000 or more, whereas about 8 percent of renter units have such incomes. Clearly, there are important income gaps between owners and renters; more distressing is the fact that the incomes of homeowners have been rising faster than renters in recent years. Between 1970 and 1979 the median annual income of owner-occupied units rose from \$9700 to \$18,300 (89%). In the same period the median income of renter occupied units increased from \$6300 to \$10,000 (59%). In 1970 the median percent of income spent by renters to pay their rent was 20 percent; by 1980 it was 27 percent. The median percent of income spent by homeowners rose from 17 to 19 percent during this period.

Finally, there are important geographical differences which are related to the quality of housing. Income is the best measure we have of the ability of a family to provide itself with adequate housing. Disparities in median income between races and between those who live in central cities and those who live in suburban areas are indicated in the table on the next page.

Median Family Income and Percent Below Poverty of
Whites and Blacks in Central Cities and Suburbs of Metropolitan Areas, 1977

	<u>Central City</u>	<u>Suburban</u>
Median Family Income of Whites	\$15,069	\$17,371
Median Family Income of Blacks	\$9,361	\$12,037
Percent of Whites Below Poverty Level	11.3%	5.9%
Percent of Blacks Below Poverty Level	31.0%	21.5%

Source: The President's National Urban Policy Report, 1980, Table 10-1, p. 10-3.

The median income of central city white families in 1977 was \$15,069 or 61 percent higher than that of central city black families. Although not as extreme, the racial income gap in the suburbs was also substantial. Among white families it was \$17,371 or 44 percent greater than that of black families. In addition, there are critical disparities between blacks and whites in poverty levels. The poverty level is defined by the Federal Government as that income below which a household is considered to have insufficient income for a minimally acceptable level of subsistence. In 1977, 11.3 percent of whites and 31 percent of blacks in central cities lived below the poverty level. In suburban areas, 5.9 percent of whites and 21.5 percent of blacks were below this level.

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Conclusion

In the nation overall we made significant advances between 1970 and 1980 in increasing the housing supply, reducing overcrowding and improving the physical condition of housing. Newer forms of ownership such as condominiums and cooperatives and industrialized building techniques used in constructing mobile homes have made homeownership a possibility in the United States. But while the nation has become even more predominantly composed of homeowners, the problems of tenants in rental units have grown.

Significant losses in the rental stock of housing have occurred. Reduced rates of public housing construction is one reason. A second factor is the conversion of rental apartments to condominiums. A third factor is the diversion of construction money from rental apartments to new condominium projects. In addition, the investment returns to landlords in purchasing and operating all but luxury dwellings have declined; higher operating costs, and the influence of rent control laws have been cited as contributing factors.

Although homeownership has increased substantially since 1970, the ability of households to purchase a home has declined drastically in the past two or three years. The cost of borrowing money has reduced the number of households who can afford to buy a home. Rising unemployment has made many people wary of undertaking new financial obligations such as a home mortgage. Lending institutions have had to become more restrictive in their lending practices due to the inability of many households to qualify for mortgage loans.

Finally, as previously cited statistics show, the distribution of housing benefits across various population subgroups remains very uneven in the United States. Minorities, the elderly and female-headed households, especially those living in the larger central cities, are significantly less able to secure decent, safe and sanitary housing at affordable prices and rents than most other subgroups. Overall, the ability of renters to afford

adequate housing has declined since 1970. Smaller average household size and the growth in the diversity of household types have heightened demands for smaller housing units, increasing pressures on the limited supply of such dwellings. A major challenge for the United States housing industry and for the public sector in the 1980's is attempting to further reduce the disparities between supply and demand.

II. THE HOUSING INDUSTRY

Introduction

The production and consumption of housing services is a major sector in the United States economy. In 1980, 30 percent of total personal consumption expenditures (\$1.67 trillion) were allocated by consumers to the purchase of housing and for household operations (furniture, furnishings, utilities, maintenance). The purchase of housing, either rental payments or payments towards buying a house, totaled \$272 billion or 16 percent of total personal consumption expenditures. This share of these expenditures allocated to housing has grown slightly during the past decade as housing costs have grown faster than personal income during the period, thus housing is requiring an increasing proportion of personal income. Various factors can be identified as contributing to the growing cost of housing in the United States: the nature of the product, the complexity of the homebuilding industry, the availability of land, inflationary trends in the national economy, and home finance conditions. In this section, the homebuilding industry will be described and the component costs of housing will be explored. Home financing will be discussed in the following section.

Housing: The Product and Industry

The characteristics of housing in the United States distinguish it from all other consumer goods and require unique production and financing systems. The fact that housing is inextricably tied to the land development process has important cost implications. Land costs have been a major contributor to the growth in total housing costs. The availability of sites endowed with required infrastructure and community facilities and services, graded and finished to specifications imposed by local governments and landscaped to create an attractive setting have added costs and increased the construction time period. The size of individual sites has also increased. Consequently, site costs as a percentage of total housing costs have increased from 12 percent in 1950 to 25 percent by 1980.

Housing in the United States is built to high standards and therefore is extremely durable. This durability means that the housing stock consists primarily of older units; new construction in any one year only adds from one to two percent to the total stock. As the stock ages (approximately 25 million units were built before 1940), it requires regular maintenance and, periodically, the replacement or renovation of major components such as the heating system or roof. A large sub-sector of the housing industry exists to maintain and repair houses as they age in order to extend their useful lives. As new housing has become increasingly expensive, the conservation of the existing housing stock has taken on greater significance.

The size of houses, averaging about 1500 square feet, their high costs (the median price of a new house in 1982 equaled \$82,000), and the variety of styles and configurations (detached one- or two-story, townhouse, apartment--garden or high rise, condominium or cooperative, ranch-type, colonial, split-level, etc.), all add substantial complexity to the production and marketing of housing. This variety of product types makes standardization

and the application of industrialized processes and components difficult and therefore, the homebuilding industry has remained much less efficient than other industrial sectors. The higher costs associated with product differentiation have resulted in many consumers accepting more standardization and the substitution of manufactured building components and cost-saving products. The growing acceptance of mobile homes and factory-built houses has occurred primarily during the past 10 years in response to the lower cost associated with these standardized units. From 1970 through 1980, 3.88 million mobile homes were delivered (352,820 per year average) which was 17 percent of all private residential units added during this period.

The nature of the housing product and the consumer, along with the diversity of local market conditions and variation in building codes and regulations from one local jurisdiction to another, has resulted in a building industry that is characterized by many small firms each producing only a few housing units each year. There are more than 100,000 firms nation-wide that build houses. Approximately 55 percent of these firms (residential builders) build 10 or fewer units per year, about 35 percent build from 10 to 100 units per year, and the remainder (10%) build more than 100 units annually. The dominance of the small firms in terms of their numerical distribution, however, is not reflected in their share of annual housing production. The small builders (10 or fewer units per year) only produce about 10 percent of the units, while the medium-size builder accounts for approximately 35 percent and the large-volume builder produces 55 percent. Yet, no builders dominate the market as some firms do in other industries. The largest builder in the United States may produce 4,000 - 5,000 units a year which, while a large number, is less than .05 percent of the total. The fragmented and small size of the homebuilding industry has resulted in diseconomies of scale and possibly has discouraged technological

innovation which have contributed to the relatively high and growing costs of housing in the United States.

The Cost of Housing

There are two principal sources of housing costs: (1) the cost of producing housing and (2) the cost of occupying housing. Both of these costs in aggregated have grown faster than the All Item Consumer Price Index during the last decade. The costs of building a house include: the cost of land, materials, labor, overhead and profit as well as a variety of minor miscellaneous costs. The distribution of production costs among broad categories provides insight into the variety of these costs and the difficulty of pin-pointing any one item which has been responsible for the growth in total housing costs.

Development and Construction Costs: Single-Family Unit

Site Preparation and Finishing		33.0%
Land Purchase	9.5%	
On-site Development	10.0%	
Off-site Development	2.5%	
Utility Hook-up	3.5	
Administration, fees	5.5%	
Landscaping	1.0%	
Driveway Paving	1.0%	
Construction		67.0%
Foundation	11.5%	
Framing, Roofing		
Wall Boards, Windows	21.5%	
Plumbing, Heating and		
Electrical	16.5%	
Interior Finishing and		
Appliances	17.5	

A general cost breakdown between materials (38%) and on-site labor (19%), reveals that labor is not a dominant cost factor inspite of the absence of technological sophistication in the homebuilding industry. However, when this present percentage is compared to the labor component in 1944 (29 percent of the total was associated with on-site labor), the increasing use of manufactured building components that has reduced on-site labor requirements as well as increases in labor productivity become evident.

The costs of occupying a house include debt retirement, property taxes, utilities, maintenance and repair. Rental costs would include these as well as administrative and management costs, and allowances for vacancy, bad debt, and profit. For households buying their house, debt retirement (that outlay to pay off the loan that covers the cost of purchasing the house) represents approximately 50-60 percent of total carrying costs. Property taxes represent about 20-25 percent, utilities about 15 percent, and annual maintenance and repair about 5 percent of total occupancy costs.

The effects of increased housing production costs are seen in part by the growth in average housing costs, although other market factors have contributed significantly to these price increases. In 1970, the median price of a new house was \$23,400. The effective mortgage interest rate was 8.4% which required annual housing expenses of \$2,652 to purchase this median priced house. To afford this housing expense required an annual family income of \$10,610 which was slightly above the average income for all families (\$9,867); 45 percent of all families qualified financially for the average price new house in 1970. By 1981, the median price new house was \$76,000. With an effective mortgage interest rate of 17.25%, annual housing expenses equaled \$12,500 requiring a family income exceeding \$50,000; only 5 percent of all families had sufficient income to afford the purchase of an average

priced new house in 1981. The 225 percent price increase over 11 years has contributed to the housing affordability crisis in the U.S. The cost of financing has been an equally significant factor in reducing the number of families qualifying to buy houses. This problem will be discussed in the next section.

Several changes affecting the homebuilding industry are helping to moderate the increase in housing prices. The average size of housing sites has declined in recent years. Also, the average floor area size of new houses has declined. As new units have become less affordable, older housing is coming under increasing pressure with the result being increased expenditures for maintenance and modernization. Finally, consumers' expectations have fallen and their previous objections to industrialized housing and components have permitted their increased use.

III. HOME FINANCING

The cost and durability of housing in the U.S. affect the way it is financed more than any other consumer good. The interdependence between the housing industry and the financial sector affects builders, sellers, and buyers. Together, the supply of mortgage money and its cost have become primary determinants affecting housing production levels, housing market activity, housing prices, housing costs, and housing consumption patterns. This section will briefly describe the structure of the home finance system, examine the trends in financing costs and their impacts on housing consumption, and outline recent changes in the way people are financing home purchases in response to the higher costs of traditional mortgage instruments.

The Home Finance System

The home finance system in the U.S. was created in the 1930's. Its constituent parts and the controls and regulations that govern the relationships among its components were designed to stabilize the housing market that had collapsed during the Great Depression and to assure that the future housing needs of the population were satisfied to the maximum practical extent by the private sector with the production of good quality and affordable houses. To accomplish this the U.S. Government established numerous agencies to help manage the supply and cost of money directed to the housing market.

This market consists to two levels of institutional activity. The Primary Market is composed of the lenders and their agents involved in making home mortgage loans directly to prospective purchasers of houses. Commercial banks, Savings and Loan Associations, Mutual Savings Banks,

and Mortgage Companies are principal examples of the Primary Market's participants. The Secondary Market is composed of both private and public financial institutions who generate the capital resources for home mortgages and acquire home mortgages from their originators in the Primary Market and hold them as long-term investments. Participants in the Secondary Market may include life insurance companies, pension funds, commercial banks, Savings and Loan Associations, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, and the Government National Mortgage Association. The relationship between the Primary and Secondary Market is critical to the supply and cost of mortgage funds. As the Secondary Market acts as the supplier and warehouse of these funds, its ability to raise money for long-term loans determines the level of mortgage activity that can take place in the Primary Market. Factors such as the rate of personal savings, the level of borrowing by other sectors including the Federal Government, risk, and regulations affecting bank reserves and discount rates, all determine the availability of mortgage funds and their cost. To help stabilize this system the Federal Government has created agencies: to insure individual saving to encourage the accumulation of capital, to especially serve the needs of home mortgaging-- the Savings and Loan Association and the Federal Home Loan Bank Board, to assure a Secondary Market for higher risk and low down payment home mortgages-- the Government and National Mortgage Association and Federal National Mortgage Association, to regulate money supply, reserve requirements, and discount rates-- the Federal Reserve Bank, and to encourage high building standards, lower down payments, and stability in home mortgage instruments--the Federal Housing Administration.

The principal sources of mortgage finance in 1980 and their levels of participation are shown below:

Sources of Residential Mortgages, 1980

	<u>Outstanding Mortgages*%</u>	<u>Mortgage as a Percent of Total Assets</u>
Commercial Banks	222.1	14.4
Mutual Savings Banks	98.3	59.0
Life Insurance Companies	126.7	27.1
Savings and Loan Assoc.	<u>\$476.7</u>	<u>75.7</u>
Total	\$923.9	32.9
*in billions of dollars		

Home Finance Costs

The rate of interest is defined as the cost of borrowing money. Although interest rates are the result of a complex variety of forces, the relationship between the supply and demand for money is of major importance. Interest rates are also influenced by the actions of the monetary and fiscal authorities of the Federal Government--the Federal Reserve and the Treasury Department.

The principal form of mortgage instrument for almost fifty years has been the long-term, amortized loan with relatively low equity or down payment requirements. Loans made without Federal Government insurance, approximately 80 percent of home mortgages, are known as conventional mortgage loans; these have generally required from 10-20 percent down payments. Federal Housing Administration (FHA) - insured mortgage loans generally have had down payment requirements ranging from 3-5 percent while Veterans Administration (VA) - guaranteed loans require no downpayment. The typical length of the mortgage loan on new homes is 30 years with older homes often having loans for 20-30 years. The overall average is approximately 27 years carrying an average loan-to-value rate of 77 percent.

The combined affect of these long-term, amortized lonas with small downpayments has been to extend the possibility of homeownership to a large proportion of the U.S. population; presently two-thirds of all households are classified as homebuyers. The same advantages that made this type of

mortgage attractive to homebuyers when interest rates were relatively low and house prices increasing more slowly than personal incomes have made this loan instrument unattractive with high interest rates and prices growing faster than personal income.

Mortgage interest rates averaged approximately 8½ percent during the 1970's, ranging from a low of 7 percent in 1971-73 to 10 percent by 1980. The conventional rate increased to 17 percent in early 1982 and has declined 2 points between late August and mid October. FHA and VA rates reached 17½ percent in September 1981 but have retreated to 12½ percent by October 1982. These FHA and VA rates usually carry financing charges (points of interest) to be paid at the time of settlement (securing the mortgage) with these representing an advanced payment of interest equivalent to the difference in earning power between the market rate of mortgage interest and the lower FHA or VA rate. Presently, 5 or 6 points (an amount equivalent to 5-6% of the face value of the mortgage) is not an unusual charge.

A comparison of costs associated with an 8½% loan for an average size loan in 1975 to a 17% loan for an average-size loan in 1982 illustrates the critical impacts of the increases in interest rates and house values on the ability of families to purchase housing. On a thirty-year loan, the following monthly and total accumulated costs are generated:

<u>Interest Rate</u>	<u>Mortgage Amount</u>	<u>Monthly Payment*</u>	<u>Total Payment</u>
8½%	\$25,000	\$192.23	\$69,202.80
17%	\$60,000	\$855.41	\$307,947.60

*principal and interest only

The impact of this increase in the cost of buying a home is illustrated in the characteristics of houses sold, the terms of sale, the characteristics of the buyer, and the relationship between the price of the house and the down payment and income levels of the buyer. These characteristics are shown below compared with those for 1976.

GENERAL CHARACTERISTICS OF RECENT HOUSING TRANSACTIONS

	<u>1976</u>	<u>1980</u>
Medium price of house purchased	\$43,340	\$68,714
Average monthly mortgage payment	\$ 329	\$ 599
percent of income	24.0	32.4
Percent buyers for first time	44.8	32.9
Average age of buyer	32.0	32.4
Source fo downpayment		
First time buyer		
Savings and investments	70.9	51.1
Help from relatives	20.4	32.6
Repeat buyers (prvious homeowners)		
Savings and investments	21.2	27.7
Previous home sale	45.5	39.7
Downpayment to sales price		
First-time buyers	18.0	20.5
Repeat buyers	30.8	32.7

Source: Statistical Abstract of the U.S., Dept. of Commerce, Bureau of the Census.

Alternative Home Financing Approaches

The high interest rates on home mortgages and their depressant effect on home sales during the 1980 - 1982 period has lead to the rapid increase in use of non-traditional mortgage instruments. These have been termed "creative financing" by the real estate industry. In fact, there are two classes of new home financing approaches. The first class involves seller participation in the mortgage, sometimes taking back the entire mortgage but more usually taking back a second mortgage to supplement a traditional bank mortgage where the buyer could not qualify for a sufficiently large first mortgage to cover the inflated price of the house and needed a short-term second mortgage to make up the difference between the first mortgage plus downpayment and sale price. The second class of instruments represent a large array of alternative mortgages all involving a feature that permits the interest rate to change over the life of the loan in response to changes in the cost of money. Several of the primary forms of new mortgage instruments are briefly described below. These are available in addition to the fixed interest rate long-term amortized loan which continues to be

the most popular form of mortgage among mortgagees although it has lost favor with mortgagors.

Adjustable Mortgage Loan (AML) - Federally chartered savings and loan associations have authority to offer a mortgage with flexible interest rates and monthly payment schedule. Typically, interest rates would be adjusted semi-annually with loan payment amounts being altered annually. Some provide for payment changes on a five-year basis. The amount of the loan would be increased or decreased to compensate for the adjustment lag between interest rates and monthly payment amounts.

Adjustable Rate Mortgage (ARM) - National banks have been given permission to offer an ARM that allows the mortgage rate to go up or down every six months by as much as one percentage point for a maximum change of 2 points annually. The AML has no such limit.

Balloon Mortgage - The interest rate remains fixed and monthly payments are made as if the loan was for 25 or 30 years. But as the end of five years (sometimes 7 years), the mortgage matures and the unpaid balance is due. The final large payment is referred to as a "balloon" payment. Typically, the loan is refinanced at prevailing rates when the original loan matures. The original lender, however, has no obligation to refinance the loan. A Rollover Mortgage has the same features as the Balloon Mortgage except that the lender is obligated to renew the loan at the end of the period at prevailing market rates.

Graduated Payment Mortgage - this type of mortgage has monthly payments that start low and gradually increase to a fixed level after five or ten years. Under a typical five-year graduated schedule, mortgage payments would rise 7½ percent a year.

These alternative types of mortgages instrument are attempts to make home loans more attractive to lenders by allowing the interest rate to fluctuate with economic conditions rather than fixing it at the time the mortgage is issued and holding it fixed for 25-30 years as is true with the conventional mortgage. From the homebuyer's perspective, the stability of the fixed-rate mortgage is preferred. However, the instability of interest rates over the past ten years has made the fixed-rate mortgage obsolete and has altered the way homes are financed for the first time since the Great Depression of the Thirties. The impact that these alternative mortgage instruments will have on the housing market is not yet clear. What is clear is that there is more uncertainty in predicting the cost of buying a house than there was in the past and that these costs will no longer be protected from inflationary pressures on the money market. Whether the supply of mortgage money will become less erratic on account of the higher and shorter-term interest rates, as would be expected, is still uncertain.

DEFINITIONS AND FUNCTIONS OF HOUSING

Alfred P. Van Huyck

- I. What do we mean by housing or shelter:
- II. What functions does housing fulfill for the household?
 - a. A physical base for the household -- protection, privacy, stability.
 - b. A status symbol, a source of power, an expression of creativity.
 - c. Financial reward through capital accumulation, rents (or imputed rents).
 - d. Development of skills in construction, in management, in community.
 - e. Possibly a base for commercial or small scale industrial activities which generate household employment and income.
- III. What does housing contribute to the nation?
 - a. Contribution to national output (GDP): construction and employment
 - b. Mobilization of savings for the national economy
 - c. Contribution to the national capital stock.
 - d. Contribution to national social stability, and community organization.
 - e. Contribution to public revenues through taxation and user charges.
- IV. Considering the range of functions concerning shelter three related definitions seem appropriate to recognize:
 - a. Shelter for the household consists of the land plot, dwelling unit, and on-site infrastructure and on-site activities of the household (commerce, industry, as well as family).
 - b. Shelter can also include the concept of the local settlement upon which the household depends for community facilities (education, health, recreation, environment, transportation) and markets); social interaction with neighbors and friends; and government services (fire, police, administration).
 - c. The Shelter Delivery System (all those entities involved in the actual provision of shelter and local settlement)
 1. legislative base
 2. public sector
 - a. administrative framework
 - b. role: to build, to finance, to facilitate
 3. Private Sector Role
 - a. construction industry
 - b. finance industry
 - c. developers, realtors, land speculators
 - d. the informal sector system

V. The elements of shelter which are of concern

- a. the plot: land and site selection
- b. the unit: shack, traditional, core, single family, row house, walk-up, high rise.
- c. the infrastructure: foot paths, roads, drainage, water (well, stand pipe, system), sanitation (pit latrine, syptic, sewer), electricity, telecommunications.
- d. the facilities: education, health, recreation, open space, markets, government services (fire, police, administration).
- e. finance sources: savings, loans, investment, terms and interest subsidy.
- f. operations and maintainence, management, administration

VI. Given the functions, definitions, and elements of shelter the key issue is how to manipulate these to best serve the people and the nation. This concerns:

- a. policy, programs, and projects
- b. standards
- c. techniques
 - 1. planning
 - 2. construction
 - 3. financing
 - 4. operations, management, and administration

These central issues are the focus of this shelter sector training workshop.

SHELTER SECTOR POLICY OBJECTIVES OF PRE/HUD

INTRODUCTION

This paper outlines PRE/HUD's shelter sector policy objectives and illustrates their varying levels of achievement through selected country experiences (provided in the Annex). It also outlines current policy objectives by country.

Starting with the 1973 Congressional mandate to focus AID resources on the "poor majority" the Office has been working toward the development of a clear consistent philosophy for the shelter sector in the developing countries.

The underlying premise of this approach is that shelter is a fundamental necessity to sustain a viable human society.

In the last decade there has been considerable shifts in shelter sector policies in the LDC's with which PRE/HUD has worked.

Major accomplishments include:

- o An increased awareness and response to the special shelter requirements of low income groups.
- o A general recognition that sites and services projects and settlement upgrading programs are an appropriate response to low income group shelter needs.
- o A growing realization that the private sector can provide a major contribution to meeting a nation's shelter needs including those of low income groups.
- o The importance of mobilization of domestic savings and building a system of housing finance organizations.
- o The gradual improvement of institutional capacity.

THE OBJECTIVES OF PRE/HUD

PRE/HUD seeks to promulgate shelter sector policies, programs, and projects in Third World countries which reflect a set of Basic and Operational objectives.

Basic objectives are focused on comprehensive improvement in the nation's shelter sector. They are national in scope, involving both the private and public sector, and therefore must be sought over the long term.

Operational objectives are specific to a given institution or project and their achievement can be more readily measured. The Office sets Operational objectives for each of its shelter sector interventions in a given country. Operational objectives provide "stepping stones" toward the achievement of Basic objectives.

The four Basic objectives of PRE/HUD along with illustrative Operational objectives (marked with a) typically sought in individual HIG loans and projects are as follows:

1. To insure that low income households have access to secure land tenure, appropriate types of dwelling units, and financial credit to obtain shelter solutions they can afford.
 - o Support home ownership solutions
 - o Support the introduction of settlement upgrading programs
 - o Support the introduction of sites and services programs
 - o Support reduction of physical standards to affordable levels for low income target groups
 - o Encourage efficient land use planning standards to reduce costs
 - o Recognize the contribution of the informal private sector and support self-help improvement programs
 - o Encourage use of local materials for construction to the extent possible
2. To achieve sustainable shelter sector delivery systems sufficient to meet the needs of the urban population with special emphasis on the urban poor.
 - o Stress the importance of private sector participation to reduce public sector financial burdens and increase efficiency.
 - o Encourage revision of unduly restrictive legislation and regulations that unnecessarily raise costs or restrict private initiative in the formal and informal sectors.
 - o Introduce techniques and practices for enhancing public sector efficiency and capacity.
 - o Support training programs to improve capacity of technical staffs and policy makers.
3. To create appropriate shelter sector finance systems sufficient to fund the required shelter program without unsustainable public sector subsidy.
 - o Stress the importance of establishing private sector shelter finance institutions
 - o Introduce methods and techniques for mobilizing private savings into the shelter finance system.
 - o Urge the use of interest rates on shelter financing which reflect the real costs of money to the lender to reduce financing subsidies.

- o Stress importance of cost recovery on shelter solutions including both units and infrastructure via user charges and taxes.
 - o Introduce methods and techniques for reducing delinquencies in payments.
 - o Stress the importance of providing access to shelter credit to low income target groups.
4. To seek the preparation and implementation of National Housing Policies whether formally written or defacto which reflect these objectives and provide an internally consistent, comprehensive framework for future action.
- o Establish a sufficient data base on the shelter sector to facilitate informed decision making.
 - o Insure recognition of the importance of shelter in national development planning and resource allocation.
 - o Define the respective roles of the public and private sector.
 - o Relate housing supply to effective demand and needs insuring specific recognition of the requirements of low income groups.

A decade ago these objectives were not clearly defined by many LDC officials, but over the years they have gained increasing support at least at the technical level.

THE INSTRUMENTS AVAILABLE TO PRE/HUD IN PURSUING ITS OBJECTIVES

PRE/HUD essentially has three program instruments available with which to pursue its overall objectives within a national context. These are:

1. The Housing Guaranty Loan

The Housing Guaranty (HG) program provides a US Government Guaranty for capital borrowed by an LDC country for financing low income shelter programs. It is recognized that HG's are no substitute for locally mobilized finance but can meet specific important purposes in advancing LDC shelter objectives. These include:

- o Providing "legitimacy" to PRE/HUD's intervention in a country shelter sector in the sense that it is a well recognized right to reach mutually acceptable terms and conditions for the loans that are guarantied.
- o Providing "leverage" toward reaching PRE/HUD objectives over time in the broader national context.
- o Providing "seed capital" for creation of needed institutions and demonstrating new shelter solutions or programs; in this sense, HG loans assist countries by sharing the risks of innovation and change.

- o Providing "liquidity" where for a variety of reasons progress in the shelter sector may be endangered if outside funding cannot be mobilized to respond to immediate situations.

Whereas the size of any given loan must depend on many factors it is essential to recognize the importance of a series of HG's over time in a given country. Each individual loan must be subjected to rigorous criteria and be clearly related to its own Operational objectives, but the underlying "leverage" is vastly enhanced by the prospect that a given loan may be part of a continuing series of loans.

Given the complexity of the shelter sector, the achievement of PRE/HUD's Basic objectives must be viewed as a process of building upon successive achievement of Operational objectives in individual HG loans over the long term.

2. Technical Assistance

Both long term and short term technical assistance (TA) contributes to the achievement of Basic and Operational objectives. Technical assistance is normally interwoven into the process of preparing and implementing HG loans. In this way the TA services can involve PRE/HUD in the shelter sector beyond the direct impact of the HG loan itself.

Long term TA involving resident advisers is usually focused on enhancing institutional capacity, and improving the housing delivery system, finance system, or national policy. Some of the accomplishments of long term advisers in achieving objectives are referred to in the attached country experiences.

Short term TA, frequently involves program lending preparation, "trouble shooting" in response to specific problems arising during project implementation, or responding to specific needs and requests by country institutions and agencies. In this latter situation, the ability of PRE/HUD to respond creates good will and respect which further enhances the climate for policy dialogue.

Over the years PRE/HUD has built a cadre of staff and consultants with expertise in LDC shelter sector issues. This staff represents a unique resource, perhaps only rivaled by the World Bank anywhere in the developing world.

3. Training and Research

PRE/HUD is directly concerned with building technical capacity in LDC institutions. Besides, training which takes place during short and long term technical assistance, the office conducts specialized training activities from time to time, supports annual regional conferences in Latin America, Africa, and Asia, and runs an annual senior level Shelter Sector Workshop in Washington. Through this approach, PRE/HUD has been able to advance the technical and managerial capabilities of LDC's and promote understanding of the issues which contribute to rational shelter sector policies.

It has contributed directly toward advancement of the skills of several hundred Third World technicians which has in turn improved climate for on-going policy dialogue in specific country situations.

PRE/HUD has also supported a variety of individual research efforts which have been designed to provide Third World technicians with specific, practical information on innovative approaches to shelter sector issues supportive of its overall objectives. For example, the office has supported research work on the use of indigenous building materials, building standards, temporary housing for disaster victims, use of bonds and secondary mortgage markets, variable payment mortgages, and is currently supporting work on the use of computer technology in project design, construction management, and financial controls. In addition, the office supports analytical case study research (for example, on squatter settlements in Columbia and housing in Nigeria).

Through sustained efforts in training and research, AID has become recognized as a leader in the development of innovative approaches to shelter problems and a major resource available to LDC shelter institutions.

CONSTRAINTS ON ACHIEVING PRE/HUD OBJECTIVES

PRE/HUD has contributed to the main stream of international thinking about Third World shelter issues. These views are generally consistent with the World Bank and other multi-national and bi-lateral agencies in the field.

The weight of evidence from all sources suggests that the achievement of these objectives would be in the national interest of the developing countries concerned. Nonetheless, progress towards achievement is usually uneven at best and almost always slow and difficult.

There are reasons for this which might be called the constraints under which PRE/HUD works. It should be noted that these constraints are not dissimilar to ones working in the United State and Europe which frustrate to a certain extent the shelter aspirations of people in the developed world as well.

Amongst the constraints are:

I. National "Macro" Context

Shelter is but one sector within a nation. Therefore forces external but clearly effecting shelter such as the rate and level of national economic growth; inflation; international and domestic market interest rates; levels of subsidy in other sectors such as food, clothing, or transport; levels of income and employment, etc. all effect the potential for progress.

In countries suffering from severe "macro" problems, it will take longer to achieve PRE/HUD objectives which must be set within the reality of the macro conditions. Nonetheless, the presence of PRE/HUD initiatives in these countries may be of the utmost importance if progress is to be achieved. In some cases reform in the shelter sector, particularly reduction of urban subsidies, may be essential to improved "macro" economic performance.

2. Local Political Agendas

Shelter worldwide is a highly political subject. Unfortunately, short term political gain is often achieved through major damage to long term shelter policies. Most countries have frequent changes in the political leadership affecting shelter sector policies which influences the ability of technical people and the private sector to sustain positive long term progress.

Obvious examples are decisions to build high standard housing with heavily subsidized costs and to use below market interest rates as a way of "looking good" in the short run while undermining the support to long term sustainable programs.

This political environment makes it necessary to have continuous shelter policy dialogue, which involves a long term commitment on the part of PRE/HUD, and to recognize that setbacks will occur from time to time.

3. Fundamental Lack of Institutional Capacity

Most LDC's suffer from a basic lack of institutional capacity and the shelter sector is not an exception. This is due in part to low salaries and limited incentives for staff and in part from an overall deficit in sufficiently skilled personnel in both the private and public sectors. This in turn limits ability to execute policies and programs even if well designed.

It is for this reason that PRE/HUD devotes much of its effort to building institutional capacity. Nonetheless, these institutional limitations can adversely impact the achievement of objectives.

4. The Large Number of "Participants" in the Shelter Sector

In the shelter sector a number of public agencies, financial institutions, private firms, community groups as well as consumer households are involved. Coordination and policy agreement among them collectively is therefore particularly difficult to achieve.

5. Social and Cultural Constraints

It is not uncommon to encounter social or cultural constraints which complicate the achievement of PRE/HUD objectives. The social/cultural milieu of a nation is always slowly evolving, but the rate of change which can be achieved within a given time period is difficult to predict.

Frequently social and cultural characteristics make the introduction of innovation difficult even though efficiency, cost reduction or other benefits can be demonstrated.

PRE/HUD as an outside agent can facilitate and accelerate the change process in a country in ways not possible internally. It can do so by bringing worldwide experience, operating across the spectrum of groups concerned, and focusing its resources behind the most promising situations.

PRE/HUD must however remain sensitive to the social and cultural context in order to be effective.

ACHIEVEMENTS OF PRE/HUD IN AFFECTING SHELTER SECTOR POLICIES AND OBJECTIVES

PRE/HUD believes that clear progress has been achieved toward its objectives over the last decade. The country experiences, found in the Annex, provide examples of particular achievements as well as some disappointments.

The first section of each of the country examples presents the shelter policy situation at the time of initial PRE/HUD involvement. There is a remarkable consistency in these descriptions in that country after country found themselves in similar situations. The main points in differing degrees were:

- o Overall weak or non-existent public shelter sector institutions;
- o Shelter finance was primarily available only to middle and upper income households, and even that was in short supply;
- o A generally hostile attitude to informal sector housing and illegal settlements;
- o A lack of recognition of the potential contribution of the private sector to low-income shelter production on the part of the public sector;
- o Incomplete or non-existent housing policies.

Obviously, many of these problems still remain to a greater or lesser extent in most countries. Nonetheless, progress has been achieved, and in some cases, remarkable progress, in responding to the problems. It is not possible to say exactly how much of this progress can be directly attributable to PRE/HUD participation. But since the office has worked to address these issues consistently over the time of involvement, it is fair to recognize that a substantial contribution has been made.

It is equally fair to say that in no country has it been possible to meet all of PRE/HUD's Basic objectives. The main areas of progress have been in the successful achievement of Operational objectives. Some of the highlights of these achievements related to the basic objectives are as follows:

The first basic objective to ensure that low income households have access to secure land tenure, appropriate types of dwelling units and financial credit has seen substantial progress in many countries.

PRE/HUD participation has resulted in a shift from rental housing to home ownership for low income groups in Botswana (where secure land tenure is provided through the innovative concept of "Certificate of Rights"), Thailand and Jamaica.

Sites and services and settlement upgrading programs have been successfully introduced in the Ivory Coast, Jamaica, Panama, Tunisia, Ecuador, Honduras, Kenya, and Botswana. In Korea, however, a settlement upgrading program in Seoul, while a technical success, did not overcome the political resistance of the city government.

This illustrates one of the constraints which frustrate the achievement of objectives.

Reductions in physical standards permits a larger segment of the low income population to acquire shelter from the total capital resource pool available. This has accompanied these projects. For example, in Ecuador plot sizes were reduced from 300m² to 60m² and the dwelling unit from 70m² to 28m²; and in Korea, after protracted PRE/HUD and government negotiations, apartments for low income households were reduced from 460 square feet to 250 square feet and this has now become the official Korean minimal standard.

Improved attitudes and recognition of the contribution of the informal sector has been achieved in most countries including Honduras, Peru, Botswana, Panama, and Tunisia.

In most cases substantial reallocation of financial resources have been made to low income groups beyond the amount of HG funding. Perhaps most successful has been the case of Honduras where low income groups recently have benefitted from approximately 70 percent of all public sector funding from a share of next to nothing ten years earlier.

These highlights are drawn from the many examples in the Annex. They demonstrate that low income groups worldwide are receiving more attention from their governments than ever before. It is, of course, too soon to say that their fair share has been fully mobilized, but the trend is in the right direction.

The second basic objective to achieve a sustainable shelter sector delivery system has also seen progress, but clearly much remains to be done in virtually every country. Nonetheless, progress has been made.

The private sector role has been recognized and supported in a number of countries such as Thailand, Ecuador, Honduras and Jamaica.

Public sector institutional development supported by PRE/HUD through training and technical assistance has shown results in Ivory Coast, Thailand, Honduras, Peru, Panama, Jamaica, Tunisia (though with difficulty to be sure), Kenya, and particularly in Botswana (where the Self-Help Housing Agencies have developed very successfully).

Some legislative improvements have been made in Honduras and Peru (both recognizing the importance of legalizing heretofore illegal settlements).

The third basic objective to create appropriate shelter sector finance systems has also met with some success in most of the countries. It should be noted here that during its first ten years of existence the HG program assisted in the successful establishment of the Savings and Loan systems in Latin America where with approximately US \$300 million of HG support a system of institutions was established which today has combined assets of some US \$20 billion.

Elsewhere in the world PRE/HUD has assisted in the establishment of savings and loan type institutions in the Ivory Coast (BNEC), and Tunisia (CNEL), and supported the development of secondary mortgage markets (JMB in Jamaica) to sustain financial resource mobilization.

PRE/HUD has consistently worked toward increasing interest rates on shelter loans to reflect the market rate of capital. It has achieved greater or lesser success in a number of countries including Panama (interest rates first increased to between seven and nine percent and now up to 12 percent), Thailand (up from six to 10 percent to recently 15 percent), Ecuador (from 4 percent to 15 percent with full costs now included), and more modest progress achieved in Tunisia and elsewhere. It can be noted that repeat HG loans assisted greatly in stepping up interest rates gradually to reduce political risk.

Concepts of cost recovery (including the necessity to include full costs in the sales price) have also seen progress. For example, in Honduras the losses of INVA has been reduced over the last five years by 80 percent, reliance on public sector funding for BEV in Peru has been reduced from 61 percent in 1979 to 55 percent in 1980, and improvement can be noted in other countries as well.

The fourth basic objective to prepare and have adopted National Housing Policies has met with selected success. PRE/HUD believes that written national housing policies should be prepared by the host countries themselves with only backup technical assistance from AID. This approach has been used successfully in Korea, Honduras, and most recently and perhaps most successfully in Botswana and Jamaica. Substantial progress has also been achieved in Peru and in Thailand (where PRE/HUD assistance initially focused on one agency, the National Housing Authority and later building upon that success has expanded to a broader national policy initiative).

The work of establishing a national housing policy is never really complete. It requires constant monitoring and change as the realities of the shelter sector change.

While a written policy statement is desirable, it should be noted that what is actually done in budget allocation and implementation is the crucial test of the responsiveness of a country to the policy objectives PRE/HUD seeks to support.

The Annex expands upon these highlights, and some measure of satisfaction can be taken in the worldwide progress to date.

The unfinished agenda remains, however, enormous. Of particular concern is the short fall in national housing finance systems particularly in Africa.

There is also the need to provide for the flow of land for new urbanization to low income groups.

There is still a general inability to recover sufficient taxes and infrastructure service fees to permit the expansion of systems on a self financing basis and to meet the demands of population growth.

There remains persistent difficulties in cost recovery of public investment in shelter.

There is still a continuing attraction, particularly to politicians, of inappropriate shelter solutions (such as walk up flats) and technology (such as industrialized building systems).

PRE/HUD hopes that it can continue to contribute in the years ahead to seeking progress, country by country, in these areas.

The contribution of PRE/HUD will continue to be an on-going effort toward achieving its Basic objectives. Success in the future will as in the past be uneven, but as the following country experiences indicates real and substantial progress has been achieved.

The continuing task for PRE/HUD will be the successful and astute blending of its three basic operational instruments HG loans, technical assistance, and training and research in order to overcome constraints and influence the achievement of Basic and Operational objectives.

As the country experiences demonstrate there have been a wide variety of Operational objectives sought over time. They differ because the constraints encountered in each country vary widely, the time sequences are different and the levels of funding range widely in scale. Each country experience is therefore relatively unique in its successes and failures.

ESTABLISHING A NATIONAL HOUSING POLICY

Presented by Alfred P. Van Huyck

I. PURPOSES OF A NATIONAL HOUSING POLICY

The need for a national housing policy is increasingly being recognized as an urgent issue among countries throughout the world. A national housing policy is essential to the achievement of the following objectives.

A. To Establish a Unity of Purpose and a Basis for Decision Making

1. A housing policy should develop a unity of purpose among all groups involved in housing or affected by it. It should ensure that the interests of all groups, especially low-income groups, are reflected in the actions proposed.
2. It should establish a basis for decision making for the public and private entities responsible for various aspects of housing development. In this sense the national housing policy acts as catalyst for achieving better coordination among many groups.
3. A housing policy should be goal-oriented: it should not only respond to current problems but also set goals, (usually quantified in a National Housing Plan). It should provide guidelines for the future definition of target groups, space, services and construction standards, levels of investment financing, and the roles of the public and private sector involved in the housing delivery system.

B. To Understand Dimensions and Implications of the Housing Sector Problem

1. All of the groups involved in various aspects of housing should understand the basic linkages between housing, national economic development and urban development.
2. There should be a common set of data, projections, and estimates which all parties involved should be using as background for their individual work. The formulation of a national housing policy brings together all relevant material, data, and projections that are required from many parts of the government and private sectors.

C. To Establishing the Place of Housing in National Development Priorities

1. Each country will resolve housing priority issues depending on its own situation and needs. What is important is that housing be addressed explicitly and policy decisions be made within a recognizable decision framework.
2. All too often the housing sector has been left as an afterthought or residue item in the national economic planning process. This in turn leaves the many housing groups within the public and private sectors without policy direction. The resulting program initiatives are ad hoc, often poorly conceived and unevenly implemented.

3. The net result is waste of managerial skill and financial resources and a lower output of housing units than would otherwise be possible.

D. To Define the Respective Roles of the Public and Private Sectors in Housing

1. The role of each sector should be related to three basic functions: to build, to finance, and to facilitate. There is a broad range of policy options in assigning functions to build and to finance. It is therefore important that the relative roles of the two sectors be defined.
2. Most housing policies and/or plans will specify in varying degrees of detail what the public sector expects to do in the housing field. The difference between this level of effort and the estimate of housing needs is then usually left as a single quantified figure labeled "private sector."
 - (a) This simplistic approach is detrimental to housing because it does not give clear guidelines to the private sector as to how it is to respond.
 - (b) Nor does it provide a convincing case demonstrating that the private sector can meet the targets set with the resources available.

In most situations, the private sector will play an important role, and the quality and adequacy of housing constructed will be directly related to the capability of firms in the private sector.

3. In order for the private sector to enter the housing field, it is necessary that it have reasonable expectations of freedom of operation (with only as much regulation as necessary to protect the public interest), that it be given access to credit and to land, and that it be allowed an acceptable rate of return on capital.
4. Conversely, it is important that the role of the public sector be firmly established so that it is able to control costs, regulate the provision of financing, and in general perform those functions that are not the responsibility of the private sector.

E. To Relate Housing Supply to Effective Demand and Need

1. The national housing policy should be designed so that it clearly responds to the effective demand and needs of all income groups. This means ensuring that for each target group the shelter solutions are affordable.
2. As mentioned previously, the formal private sector's role should be defined in detail. Most often private sector developers with financing from commercial banks, S and L's, etc., serve middle- and upper- income groups. Thus their present production vs. capacity and the proportion of income groups served should be investigated. Oftentimes it will be found that the market at the upper end of the income scale is saturated and standards of private sector production can well be lowered to serve

middle and moderate income groups.

3. In most developing countries today, however, it is the informal private sector which is producing most of the housing. Oftentimes informal sector housing, i.e. housing not built or financed by existing housing construction and finance institutions, comprises over two-thirds of the urban housing stock and 80 to 90 percent in rural areas. Thus, the operations of this important sector, often ignored in formal housing policies, must be included in the formulation of any realistic housing policy. Sites and Services and Settlement Upgrading programs are useful in harnessing informal sector initiative.

F. To Identify and Eliminate Sectoral Bottlenecks

1. Housing policy should identify specific problems or bottlenecks in the housing process and make recommendations to overcome them. For instance, in some developing countries just beginning to experience large-scale urban development, virtually no key institutions and legislation may be in place.
2. The legislative base in many countries often has a direct link back to the days of former colonial power.
 - (a) The laws then were designed to ensure high standards of housing for Europeans. Building codes, subdivision procedures, zoning laws, and laws governing landlord-tenant relationships may be constraints on the construction of new housing and the operation of the rental market.
 - (b) The housing policy should call for legislation to create laws suited to the needs of the developing country. These will often be quite different from laws developed during the days of colonial power.
3. In many countries there has been a tendency to create agencies at all levels of government in response to narrowly defined housing needs and as a method of overcoming the failure of agencies already in existence. As a result, it is almost impossible to ensure smooth administration of housing policy. A national housing policy should therefore recommend administrative and institutional changes necessary for improved implementation.
4. There is need in most countries for partial public land ownership and development, if not housing construction, in order to ensure that land is efficiently developed and that land is available for low income groups in suitable locations. Thus land management and development agencies might also be necessary as part of the housing policy.

II. CONTENT OF NATIONAL HOUSING POLICY

The content of national housing policies will be different for each country because of very wide differences in social, economic, cultural, and political factors which must be considered. Therefore, it would be of little value to attempt to discuss the specific content of a national housing policy. However, key concepts and broad areas of substance can be stressed within which specific policy should be developed.

A. Background Situation

In preparing a national housing policy and subsequently national housing plans, a major effort should be made to gather background information on the housing sector and to establish an adequate data base. This need not be done all at once, and indeed, it is best for housing data collection to be the continuing function of an appropriate agency. This data need only be summarized in the housing policy document itself in order to provide a frame of reference by which to understand the policy recommendations which follow. Among the specific items of information which might be included in the housing policy are the following:

1. Housing within Economic Development

The historic relationship between the housing sector and the overall national economic development effort can be expressed by such indicators as the proportion of residential investment to overall capital formation and the percentage of the gross national product represented by housing.

2. Housing Problem

Information on the dimensions of the current housing problem and projections of the future housing requirements should recognize both rural and urban housing and cover the demographic factors related to housing: employment and household income distribution, household expenditure patterns, and levels of household income allocated to housing. It should include an analysis of the existing housing stock and estimate current and projected demands (by location and income group). It should include an analysis of urban land demands and related problems as well as an analysis of construction costs and building materials problems and related issues.

3. Public and Private Sector Roles

An historical review of public and private sector responses to the housing issues using quantified data in numbers of units constructed and capital invested should be presented. This information should establish the scale of the response to housing needs as well as the likely trends under existing policies in the future. The analysis should establish the adequacy of this level of response given dimensions of the problem identified in Item B above.

4. Delivery System

The current housing delivery system should be described for the public, private, and informal sectors along the following lines:

- The public sector delivery system should identify existing organizations responsible for housing production and give the nature of their programs, the scale of their operations, and the types of housing being constructed. It should identify housing finance organizations by organization, the types of housing financed, the terms and conditions of loans, and an identification of the subsidy elements.
- The private sector delivery system should identify house building activities and capacity of the private contractors, the private sector sources of housing finance and the terms and conditions of loans, and the capacity and content of the building materials industry.
- The informal sector delivery system should be described including attempts at a quantified analysis of the number and distribution of individual self-built dwelling units, the methods of construction and finance being utilized, and a discussion of the quality and characteristics of the dwelling units being built.

B. National Housing Policy Objectives

The objectives of the housing policy are perhaps the most important part of the document. The objectives statement will become the criteria whereby specific actions or lack of actions can be evaluated within the housing plan and during implementation. In the housing policy document the objectives statement should be specific as to direction and implications, but need not be quantified. Quantification should occur while preparing the housing plan. While each country must determine its objectives for its own situation, specific objectives should be developed in at least the following general areas:

I. To Achieve the Maximum Addition to the Housing Stock of the Nation

- a. The central objective of housing policies and programs should be to achieve the maximum addition to the net housing stock of the nation. The fundamental emphasis must be on reducing the housing deficit and achieving levels of production which can keep up with new household formation. Given the enormous numbers of total dwelling units to be provided, each nation must concentrate its limited resources in the most efficient way.
- b. In most cases achievement of this central objective will mean orientation of the public sector's role in housing to establish nationwide programs focused on meeting the land and

infrastructure needs of lowest income people who cannot afford to participate in regular public, semi-public, and formal private sector housing programs.

- c. It will mean preservation of existing housing stock through upgrading programs.
- d. There also needs to be the cessation of those actions (such as demolition of squatter settlement housing), which are inherently counter-productive to the central objective of ensuring the maximum net addition to housing stock.

2. To Establish Priorities Among Urban and Rural Areas

Although rural development may well have priority over urban development, allocation of housing resources should favor urban over rural housing.

- a. This conclusion is based on the fact that housing problems are most acute in urban areas, and rural housing needs can be met more efficiently through self-help.
- b. Among urban areas the distribution of housing resources should seek to reinforce national strategies for population distribution; however, capital cities and large urban centers should be encouraged to maintain their housing stock through upgrading programs and to allow expansion at the rate of population increase through minimum standard sites and services projects which will not in themselves invite additional migration.

3. Target Groups for Housing Resources

- a. The relative priority for housing resources by source (public, private and informal sector) should be related to target groups within the population. The population to be provided housing should be divided into target groups that reflect income groups of the general public and special groups.
- b. In addition to target groups by income classification, many countries designate special target groups for whom housing programs are developed; for example, civil servants, military officers, veterans, industrial workers, and refugees may have special priorities for housing resources. These groups, if they are to have special programs, should be recognized in the objectives statement.

4. To Establish a Financially Self-sustaining Housing Sector

- a. In order to continually provide maximum additions to the housing stock, a financially self-sustaining housing sector must be created. To obtain such a goal several principles must be incorporated into the housing policy:
- housing subsidies should be minimized, if not eliminated; ¹
 - housing solutions should be designed such that they are affordable to even the lowest income groups.
 - maximum cost recovery from all programs should be obtained;
 - opportunity for self-help and participation from the urban poor should be provided;
 - housing programs should be flexible and capable of change in response to the changing needs of urban populations.

Given maximum cost recovery, the current emphasis on settlement upgrading and sites and services projects meets these criteria very well and offers a logical response to the requirements of the urban poor.

5. To Mobilize and Channel the Resources of the Informal Sector

- a. In spite of a well-organized approach to housing in both the public and private sectors, it is unlikely that most countries will be able

¹ The general use of large subsidies within housing programs should be discouraged. In most cases the use of subsidies by governments acts to the detriment of the overall housing sector because it tends to limit the amount of housing which can be built over time by the public sector, and it drives the private sector away from meeting the needs of middle and low income groups because they cannot compete with the subsidized pricing policies.

It may not be possible for a country to terminate all subsidies abruptly, particularly in situations in which a large amount of subsidized housing has already been introduced in the market. The objective should be to phase out general subsidies over a reasonable period of time in order to establish viable, self-financing public sector housing institutions.

The first step is initiating adequate cost accounting of the subsidies provided and moving away from interest rate subsidies (which require annual subsidy contributions during the life of the mortgage) toward once-only write-down subsidies.

to meet the needs of all their low income groups. Developing countries must, therefore, recognize the potential contribution of the informal sector and encourage self-help housing.

- b. In addition, the informal sector should be recognized as a legitimate supplier of housing in the nation, and appropriate areas should be provided within cities for self-built houses.

6. Increasing Program Cost Recovery

In order to achieve the goal of a financially self-sustained sector, effective cost recovery mechanisms must be instituted for all programs. Examples of some means being used are:

- deductions from salaries at source, especially for public sector employees.
- contracting with private collection agencies.
- instituting incentive plans for estate management and community development staff.

C. The Housing Delivery System

It is, of course, necessary to establish within a country a housing delivery system which reflects the overall objectives to be achieved and provides a relevant procedure for implementation. The housing policy should seek to define the housing delivery system which is desired while leaving specific detailed recommendations for implementation to the housing plan. Among the items to be considered are the following:

1. Updating Legislation

- a. The legislative base is frequently ignored in setting housing policy; yet it frequently works counter-productively to achievement of housing objectives. Building codes, subdivision procedures, and zoning laws may all be real constraints on the housing process relevant to the given level of resources. Taxation laws and laws governing the landlord-tenant relationship may also inhibit development of a rental housing market.
- b. Legislation also defines the housing finance system. Besides establishing finance institutions and defining their authority, legislation affects land tenure, mortgageability, title registration, and other legal considerations.
- c. In framing a housing policy, careful review of the legislative framework affecting housing is imperative, and decisions must be taken as to whether or not the existing legislative base is conducive to achieving housing policy goals.

2. Clarifying Institutional Responsibilities

- a. The government's institutional and administrative framework usually present fundamental questions to be resolved. Many developing countries have found over the years that a chaotic administrative situation has developed through the ever expanding number of agencies and actors involved in the housing process.
- b. There has been a tendency to create agencies at all levels of government in response to narrowly defined housing needs and as a method of overcoming the failures of agencies already in existence. For example, in Jamaica at the end of 1981, housing programs and functions were spread throughout 5 ministries and 21 agencies.
- c. Thus, housing policy should seek to define responsibilities of the various agencies and organizations involved in housing at each level of government and to ensure that there is an agency charged with each kind of function and responsibility. For example:
 - Housing policy and planning functions might involve responsibilities at the national level for the Ministry of Housing (or Public Works), the Ministry of Economic Development, and the Ministry of Finance.
 - Housing administration and controls might involve the Ministry of Housing at the national level and various local governments. The responsibilities of each need to be identified.
 - House building capacity might be established in various government organizations, each with a different program perspective. For example, there may be house building programs in a National Housing Corporation, a Ministry of Housing, Ministry of Agriculture (rural housing), other ministries (for their own civil servants), other autonomous agencies (for their workers), and provincial and local governments. The housing policy should define the area of building responsibility of each organization, target groups for which housing is constructed, sources of finance, and the terms and conditions of cost recovery if any. The purpose of the housing policy is to reduce overlaps between agencies, avoid redundancy of programs, unify terms and conditions for cost recovery, and ensure that public resources are utilized according to housing policy objectives.

3. Relating Sources of Finance to Housing Suppliers

Housing finance capacity might come from a variety of sources which should be clearly identified and related to specific housing programs and target groups of housing users. For each of the public sector housing

suppliers identified above, there should be a specific source of finance. The available sources of finance to be considered include:

- a. Direct government budget support through annual contributions in the form of equity capital to an institution or the direct construction or purchase of housing stock.
- b. Government loans with prescribed terms and conditions of repayment.
- c. Government guarantees for loans from the private sector or international sources.
- d. Reinvestment of cost recoveries from previously built public sector housing which has been sold, leased, or rented to households.
- e. Government encouragement of private savings.

4. Defining Public and Private Sector Roles

The role of government in facilitating the private sector housing delivery system should be described. If the private sector is to be called upon to play a significant role in housing, as is almost certainly going to be the case in most housing policies, then it is important to identify how this can be achieved. In describing the private sector role in the national housing delivery system, attention should be given to the following:

- a. The capacity of the private sector should be increased to achieve the necessary levels of construction desired for appropriate target groups. Government should consider methods for providing incentives to the private sector to achieve its desired role in the housing delivery system.
- b. Incentives to be considered for inclusion in the housing policy might include, depending on the individual local circumstances, various tax benefits; assistance by government in land assembly; simplified procedures for government licenses, permissions, and approvals of appropriate housing projects; training to ensure an adequate supply of managers, foremen, and skilled workers; priorities for importation of essential equipment and materials not available locally; and priority allocation of building materials to ensure consistent supply at job sites.
- c. Consideration should also be given to appropriate means to encourage establishment and development of small contractors and to ensure that sufficient construction capacity is distributed throughout the country to meet overall national housing objectives. Training in construction management should be encouraged to ensure smooth implementational larger scale projects.

- d. The supply and quality of building materials and the development of a domestic building materials industry should be improved. The government should consider the ways in which the building materials industry can be facilitated in achieving national housing objectives.
 - Among the methods to be considered are providing access to credit for building materials suppliers, giving priority for importation of essential equipment, encouraging standardization of housing components, maximizing the utilization of local materials, and training for managers and foremen.
 - In addition, training for architects and engineers should be encouraged in order to achieve more efficiency in housing design and building material conservation.
- e. The supply of capital to support private sector housing construction should be increased. The mobilization of capital for housing construction is essential, and the greatest potential in most countries rests in channeling private savings into housing.
 - The government can facilitate mobilization of private savings through encouraging private housing finance mechanisms such as savings and loan associations, credit unions, cooperatives, etc. Savings mobilized for housing through such organizations are frequently captured outside existing savings institutions and therefore are a net increase in available investment capital rather than merely a redistribution of already mobilized capital.
 - However, government (depending on the priority of housing) may wish to augment capital availability by requiring an allocation to housing investment from commercial banks or other financial institutions which presently are not making housing loans. Many countries have also established an employer-employee tax in salaries, the proceeds of which are designated for housing.

5. Defining Public and Informal Sector Roles

The position of government toward the informal sector should also be specified in the housing policy. In most countries it will be necessary to recognize the fact that the public and private sectors will not, at least in the near term, be able to meet the full housing demands of the population. Therefore, the informal sector will have a continuing and vital role to play in meeting shelter requirements of people. Measures government is prepared to take to facilitate the development of informal sector housing should be specified. This might include procedures for securing land tenure, access to minimal credit for house construction or improvement, exemption from building codes and other regulations appropriate only to higher standard housing.

VI. DESCRIPTION OF THE BASIC HOUSING PROGRAMS

The housing policy document should include a general description of the housing types and kinds of projects which are to be encouraged in the public and private sectors. The description in the housing policy document should only set broad guidelines for the housing programs in order to allow ample flexibility for design of individual projects.

The housing types which should be identified would depend on local circumstances within the country in particular urban and rural centers. In general, however, consideration should be given to the following general categories of housing types:

1. Settlement Upgrading

Settlement upgrading programs are designed to respond to needs of the urban poor where they currently live. The philosophy of this type of project is based on the assumption that most developing countries cannot keep up with new growth housing requirements and that it is therefore essential to conserve and improve existing housing stock, even if at a substandard condition.

This approach is justified because for the most part the quality of the physical residential environment is more important than the actual quality of the house structure itself. Therefore, substantial benefits can be gained by the urban poor if environmental improvements are made to the neighborhood (such as improved water supply, sanitation, drainage, electricity, and roads and footpaths). In addition, settlement upgrading programs usually provide some means of transferring secure land tenure to the residents.

2. Sites and Services or Core Houses

The term sites and services projects is given to a wide variety of physical solutions to settlement needs of the urban poor. The common characteristics of all sites and services projects is that a complete house unit is not provided as part of the project itself. The household must either complete a partial house or build its own house from the start.

3. Complete Housing Units

Complete housing units such as: high-rise apartments; walk-up apartments; row houses; duplex houses; and single-family houses are usually financed by the private sector for middle and upper income families.

4. Rural Housing

Types of rural housing to be supported might include complete farm units, rural settlements based on sites and services and core house concepts, and rural house improvement for existing units.

THE IMPACT OF THE HOUSING GUARANTY PROGRAM (HG) IN HONDURAS

AUGUST 1982

I. Background

From 1976 to 1978, the AID Regional Housing Office for Central America (RHUDO) provided technical assistance to Honduras in the preparation of a national housing policy and plan which would focus on the basic shelter needs of the population in that country. The policy was adopted in February of 1977, the plan in July of 1978. Following that, three Housing Guaranty projects for a total of \$45.5 million have been authorized for Honduras.

These AID efforts through the Housing Guaranty Program have been largely instrumental in promoting ~~and~~ supporting a dramatic shift in the production of shelter to address the basic shelter needs of the urban poor in that country, as evidenced by the following facts:

1970-74 ¹	1981-82 ²
\$19 million invested per year in all types of housing of which	\$19 million invested in one year in housing
- <u>none</u> went to families in poorer half of the urban population	- <u>exclusively</u> for families in the poorer half of the urban population
- <u>95%</u> to families in the <u>top</u> 10% of the income distribution	- 70% of the total investment in housing (estimated to be \$27 million) is for bottom 50% of the income distribution
Total annual production of housing in urban areas is 2,000 units	Projected number of shelter solutions (includes new shelter and upgrading) to be delivered in 1982 is 2,500
- <u>none</u> affordable by the poorer half of the urban population	- <u>all</u> for families in the poorer half of the population
<u>None</u> of the need for new housing among the urban poor is being met. The stock of inadequate housing (lacking basic services and with insecure tenure) is increasing by 4,000 to 5,000 units per year just in the major cities.	In 1983, production of shelter for families below the median is projected to increase to over 9,000 solutions. At this rate, all new need generated by population growth in the poorer half of the population of Tegucigalpa and San Pedro Sula will be met. In addition, the accumulated "deficit" of housing, that is, units with problems of tenure and lack of basic services in those cities will begin to be reduced at a rate of 3,500 per year, enough to eliminate the problem by 2,000.

¹ "Politica Nacional de Vivienda: Resumen del Marco de Reference", CONSUPLANE, March 1977.

² Taken from the Project Delivery Plans for Projects 522-HG-005/006/007

II. Objectives and Actual Results Obtained by Individual Housing Guaranty Project:

Project 596-HG-003 (CABEI)

Objective

- Lower cost units (\$3,000 base price in 1975) financed through regional secondary mortgage market.

Achieved

- August 1977 CABEI provides financing for first 70 core units delivered in Honduras. It is a coop project developed by FEHCOVIL, a private non-profit organization. (To date over 600 core units have been delivered by FEHCOVIL). This coop core housing project provides a major breakthrough and serves to convince many skeptics in Honduras and Central America that minimum housing concept works and is accepted by beneficiaries.

Project 522-HG-005 (Shelter for the Urban Poor)

Authorized: September 30, 1978 HG: \$10.5 million

Objectives

- Promote shift in production of Housing Institute (INVA) to lower cost solutions

Achieved

- January 1981 INVA delivers its first core units (Faldas del Pedregal 350 units)
- November 1981 INVA delivers second core unit project (Las Brisas 485 units).
- August 1982
100% of INVA's production is of lower cost solutions as evidenced by:
 - o 1,200 sites and services under construction with delivery complete by January, 1983.
 - o 835 core units delivered.
 - o 1,435 core units under construction with delivery staggered over a period from end of August 1982 to March 1983.

Support INVA efforts to improve its financial position and increase productivity

	<u>1977</u>	<u>1982</u>	<u>77-82</u>
-			
Delinquency	3.%	1.2%	(60%)
Expenses	\$1.6	\$ 2.25	40%
Profit (loss)	(\$1.3)	\$.25)	(80%)
New Investment in housing	\$4.8	\$12.9	170%
Units delivered	—	1,500	n/a
Average units 55-77	435	1,500	245%
Total mortgage portfolio	\$ 8	\$22.5	180%

- In large measure, the increase in productivity is due to increased reliance on the private sector. 100% of new projects to start after August 1982 are through the private sector of which 40% are on a turn key basis. This percent will increase as INVA finishes up its projects on sites it purchased years ago. Even in these cases which represent the remaining 60% of production, all construction is being done by private builders under contract.

Project 522-HG-006 (Urban Upgrading)
 Authorized: May 9, 1980 HG: \$10 million

Objectives

- Institute cost-recoverable urban upgrading program in Tegucigalpa and San Pedro Sula

Achieved

- December, 1981 District Council of Tegucigalpa (CMDCC) initiates first upgrading project ever undertaken in Honduras (Tres de Mayo/ water and sewer for 1,500 families).
- February, 1982 Municipal Government of San Pedro Sula (MSPS) initiates first upgrading project in that city (Chamelecon/ water for 2,000 families).
- As of August, 1982 a total of six projects are under construction and will benefit over 4,000 families.
- In all cases there is prior, written approval of the community to repay the investment on monthly payments ranging from \$4 to \$10.

- Provide legal, stable tenure to residents of upgraded communities.
- CMDC has prepared legislation to simplify and reduce the time of processing titles in illegal subdivisions which will be presented to the Congress for approval. The CMDC will proceed in the meantime with granting 1,500 title in Tres de Mayo this year under current procedures.

Project 522-HG-007 (Private Sector Shelter Program)

Authorized: September 29, 1982 HG: \$25 million

Objective

- Involve the private builders and savings and loans in producing ~~and~~ selling for their own account (not for the government) housing affordable by the urban poor and in managing the resulting loan portfolio.

Achieved

- As of August 1982
 - o 795 25m² units costing \$3,800-\$4,000 sold and delivered.
 - o 4,100 additional units in process.
- As evidence of the agility of the private sector, this project which was authorized last, is the most advanced in implementation.

III. Future Prospects

Authorization will be sought in FY 83 for a new \$15 million HG project in Honduras. It will seek to expand further the policy and institutional gains described above. It will also seek to build on the lessons learned in current projects.

Objectives

- Develop large scale shelter production outside the major cities.

The only shelter programs in Honduras whose scale is in proportion to need, are those in the two major cities. There are good possibilities of accomplishing this in secondary cities. A much more difficult task, and one which will take longer, is to develop rural housing programs on a sufficient scale.

- Increase the financing available for shelter in Honduras from internal sources, through:
 - o greater mobilization of voluntary savings.
 - o access to domestic capital markets.
 - o access to public pension funds.

This is the most critical step remaining to be taken if the shift in emphasis in the production of housing in Honduras is to be truly replicable and self-sustaining. The current heavy reliance on external financing (±80%) must be reduced.

Access to domestic financing will be made feasible by the substantial increase over past experience in the interest rate charged for shelter solutions in on-going HG projects. Time deposits in Honduras yield 15-16% currently. The maximum mortgage interest rate is 19% at this time.

INVA is already using its GOH capital contribution to leverage more expensive resources (the HG is passed on from the GOH at 16.5%).

The upgrading project is operating at 17% interest rate to the beneficiaries, which would make it feasible for the municipalities to borrow locally to continue the program.

The S&L's are charging 17% on HG financed loans (19.5% effective rate including commissions and other fees) requiring only a small increase to continue with domestic financing.

"Housing Policies in Developing Economies"¹

by

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Any economic evaluation of housing policies in the Third World must address two central concerns. First, what role does housing as a sector play in the economies of developing countries? Second, based upon this, what forms of government interventions are useful, and what kinds of policies may create more problems than they solve? The two questions are so closely related that they cannot really be addressed separately. As a consequence, this paper is organized along a slightly different dimension. In the next section, four arguments are reviewed which are frequently advanced relating to the desirability of subsidizing the consumption of housing in the Third World - beyond that which individuals, operating in private markets will consume themselves. Putting the various arguments together, there appears to be little merit in the widespread subsidization of housing. The second section then suggests three areas in which the housing sector does seem to need government assistance - involving the establishment of "support systems" for private markets to better operate within.

I.

Government assistance to housing, in the form of subsidies, can come in many forms: materials can have their prices regulated, land may be provided

¹Prepared for U.S.A.I.D., October 1982. All opinions expressed are those of the author.

free of charge, rents may be fixed, credit advanced at below market rates, and publicly owned housing rented at below cost. The form of the subsidy, in this discussion, is not as important as the underlying arguments advanced either for or against it. Four such arguments have received particular attention in the last two decades, and each deserves some scrutiny.

(1) Housing as a sector should be assisted because it generates benefits to society beyond its market price. This argument usually suggests that housing improves the occupant's health, or productivity beyond that which he is aware of. Unfortunately, there is little evidence of any such effects, and no evidence that consumers are unaware of them. As long as consumers are aware of such efforts, they may well place the appropriate value upon them, and there will be no error in their private decisions. In fact, the health and productivity argument probably has much more substance when applied to basic foods, rather than housing.

(2) Housing investment creates jobs and helps economic growth. Despite this often advanced thesis, economists actually tend to argue the reverse. They see housing services as being produced exclusively from housing capital and creating no ongoing jobs beyond those used in the construction of that capital. By contrast, a machine may also create jobs in its construction phase, but then will continue to require substantial labor inputs throughout its life. If developing economies are characterized by capital shortages, and labor surpluses, then scarce investment should go to those sectors generating many ongoing jobs rather than housing. Of course, if there is not un- or under-employment, then housing merits the same priority as any other investment.

(3) Housing assistance is an important way of helping the poor of developing nations. This argument involves a number of points which must be discussed

separately. First, the income elasticity of housing is estimated to be slightly greater than one in Third World countries while slightly less than one in the more developed nations. Thus if the housing sector as a whole receives assistance, much of those funds will go to the wealthy, not just the poor. If the poor are to be assisted in a cost effective way, therefore, the subsidies must be given only to selected individuals.

Even restricting housing subsidies, say, to the lowest half of the income distribution usually creates too broad a clientele for most governments to afford. For example, to provide a 30m² finished flat for every family below the median income, would use up 25-50% of GNP in many countries - on a current basis, ignoring the backlog. Applying such a program only in larger urban areas might possibly reduce the drain to 10-20% of GNP, but currently, most countries spend only 3-6% of GNP for all forms of shelter. Thus providing housing at this scale - even if to only the poor - is simply financially infeasible for most developing countries. Governments that attempt such programs, almost always wind up rationing the finished flats - as scarce commodity.

This raises the final issue, which is even if countries could afford it, is it desirable to subsidize housing as opposed to, say, food or clothing assistance? Economists generally agree that if cash transfers are impossible, the poor should be helped through reducing the price of basic commodities, which the poor currently consume a lot of, and which they tend to consume in similar amounts with the subsidy. In this case, the subsidy literally acts as a vehicle for transferring cash. Certain foods seem a far better candidate than housing in this regard. The most sound argument made in favor of housing assistance seems to be that housing provides people with a form of wealth, rather than income. This kind of wealth can give them some financial leverage later on, which income never seems to in countries with poor credit

markets. This idea perhaps merits some further study, but in general, the evidence on the desirability of housing subsidies is weak.

II.

If subsidies which assist housing consumption are such a dubious proposition, is there any role left for governments in the shelter sector? The answer here, would seem to be a clear yes, and the assistance governments should provide falls into three categories: infrastructure, land use controls and financing. Each deserves considerable attention.

(1) Infrastructure. The provision of infrastructure (such as roads, water, sewage treatment, electricity) has traditionally been regarded as the domain of the public sector for a number of reasons. First, most such services have high scale economies, and so public provision protects against private monopoly power. In addition, however, the consumption of these services often creates social benefits (improved public health) or social costs (road congestion) which can only be internalized by public intervention. Under these conditions, economists generally agree that cost recovery pricing is not necessarily desirable. Marginal cost plus social taxes or subsidies may well be warranted.

The problems with applying such recommendations in developing countries are several, however. First, any tax funds used to subsidize such services generally must come from very scarce national revenue sources. Inevitably it seems that utility subsidies are hard to come by, and so without cost recovery pricing, the provision of services generally lags behind demand. The rationing of services that generally follows, usually passes by the lower income areas which frequently need the services most.

The issue in the provision of infrastructure, then, is whether subsidies should be abandoned, even when justified, in favor of strict cost recovery? Doing so would mean more expense to consumers, but probably more widespread supply. Many institutional questions also arise in trying to implement full cost recovery. Should independent authorities be set up with no access to tax funds? Should such authorities be allowed to issue debt outside of the controls often imposed by national finance ministries? The question of what combination of institutional structure - economic policy would best provide infrastructure in the Third World merits much more attention.

(2) Planning codes - and land controls. Controls which restrict an owner's use of his property, or which mandate certain building characteristics are frequently justified when the character of individual structures may affect surrounding properties. Regulations on noxious uses, setbacks, light, open space can be useful when the social benefits of such controls exceed the additional private costs they impose on property owners. The problem in developing countries is to assess these costs and benefits in the context of the country in which the controls are being applied. Too often, most developing nations simply adopt the controls or standards of more developed countries with little thought given about their justification or consequences.

Partly because of these "borrowed" standards and controls, private developers find it very difficult to legally subdivide land and build low-income housing. Much land changes hand in the Third World, and much residential construction occurs which is not registered, because doing so necessitates meeting the legal standards or controls. Obeying these standards would be far too expensive for the low-income market. Several recent studies have estimated that as much as 75% of residential construction in Third World countries is "illegal" - in this sense.

The consequences of this illegality are several. First, building permit data is largely useless in many countries and officials must wait until a census enumeration to determine the actual level of construction activity. Secondly, officials are often forced to provide services to such areas - ex post, rather than ex-ante, and the former is far more expensive. Third, the tenure that individuals acquire over their housing or land in these cases, is less than complete, and the resulting insecurity may reduce investment in the site. The design of an easy land-construction-registration scheme, which imposes minimum burdens, aids planning, and guarantees tenure should be a high priority in developing countries.

(3) Housing Finance. It is now widely accepted in economics that potential savers and borrowers must have an institutionalized mechanism to exchange their funds. Informal credit markets involve monopoly power and risks which result in excessively high interest rates. Despite this recognized need, the formal credit systems in the Third World suffer from two problems. First, interest rates are often fixed by authorities, at levels too low, so that savings is discouraged, and credit demand is unmet. Secondly, countries are reluctant to index their credit systems so as to offset the large bias in credit costs introduced by inflation. The first of these problems has already received much attention, but the second has not.

Developing countries generally have moderate (12%) to high (50%) levels of inflation. This rate of inflation, of course, will be built into interest rates - a phenomena which at least partly explains both the high cost of credit - and its variability over time and across country. Under these conditions the standard fixed-payment loan results in very high initial mortgage payments, which decline in real terms regularly over time. The inability of borrowers

to afford the interest rates over the first few years can sharply erode the demand for loans. On the lender's side, there also exists a substantial risk to tying up funds with a fixed return when inflation is so variable. A good return one year may be a negative return the next.

In countries with truly high inflation (Brazil, Israel) indexation has eliminated these problems. Savers (and lenders) receive a fixed real rate of return which is guaranteed above the level of inflation. Borrowers, likewise, pay only a real interest rate (typically 6-8%), but on a balance that rises with the rate of inflation. While indexation is essential in these countries, there is growing evidence that it could make a substantial difference in the credit markets of those countries with much more moderate inflation. In principle, indexation increases the risk-free rate of return to lenders - encouraging the formation of savings, and reduces the lifetime cost of credit to borrowers - making housing more affordable.

III.

In many respects, the shelter programs supported by the U.S.A.I.D. approach the housing problem increasingly from this perspective of economics. Projects such as sites-and-services, for example, emphasize land subdivision with realistic standards, infrastructure and innovative housing finance, rather than the direct subsidization of housing. The most important agenda for the future would seem to be to institutionalize these ideas into the ongoing planning process of the developing nations.

ANALYSIS AND DEFINITION OF THE APPROPRIATE ROLES OF THE PUBLIC AND PRIVATE SECTORS

FOREWORD

In a market economy producers and consumers act and react in favor of their own interest, aside from the consequences of their behavior. - Such consequences imply the best use of their resources. Each market decision is influenced by a number of established standards, tending to guide, up to some extent, the activities of all the entities involved, allowing them to approach to the optimum benefit expected. To reach this goal, the assistance of the community is needed, in determining the - parameters of the trade response in the light of the conditions of supply and demand.

Therefore, it is necessary to define the role of the public and private sectors, looking forward an approach to bring into harmony the - activities to be performed by each one of these sectors.

To the extend to the housing sector is concerned, we find that a shelter problem exists, as shown by the unfulfilled housing needs of a - large sector of population that should be address somehow.

Upon being aware of the magnitude of these needs, housing demands are determined; the required investment amounts are established; the market framework defining what shall be performed by the private as well as by the public sector, is put into operation.

Consequently it is concluded that the responsibility shall not only fall on one of the sectors, but rather there shall exist a dual system whereby the efforts of the entities involved in the housing market be - complemented, as it is pretended to be explained through the present - theme.

I. BRIEF INFORMATION ON THE COUNTRY

A. THE CENTRAL AMERICAN REGION

The Central American region is constituted by 5 small and independent republics: Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica, between the republics of Mexico and Panamá. Its area is 440.877 Sq. Km.

The total population as of 1980 was 20.696.000 million, 43% urban (8.905 million) and 57% rural (11.791 million) and a working population of 6.353 million (equivalent to 30.7% of the total).

The gross domestic product (GDP) in 1980, was US\$21.077.7 million. Agriculture and livestock was US\$5.033.5 million, commerce US\$4.788.1 million and industry US\$3.769.9 million, as the major economic segments, representing 24.0%, 22.7% and 17.9% respectively.

The total Central America exports registered for 1980 were of US\$4.621.4 million, the major products being the following:

a) Green Coffee	34.5%
b) Bananos	9.1%
c) Cotton	6.3%
d) Meat	4.9%
e) Unrefined Sugar	4.0%, and
f) Sea food	1.7%

Total imports for 1980 amounted to US\$5.991. million, distributed as follows:

a) Intermediate goods	US\$ 3.032.0 million	50.6%
b) Consumer goods	US\$ 1.535.2 million	25.6%
c) Capital goods	US\$ 1.392.2 million	23.2%
d) Other imports	US\$ 31.7 million	0.6%

Even if there are some differences in regard to territorial area,



GULF OF MEXICO

MEXICO

BELICE

CARIBBEAN SEA

GUATEMALA

HONDURAS

EL SALVADOR

NICARAGUA

COSTA RICA

PACIFIC OCEAN

PANAMA

CENTRAL AMERICA

total population and population density/sq.km among these countries, historically, geographically and ethnically, they can be identified as components of a close and integrated block where the agreement of common interest in political, cultural and economic aspects, - produced by the presence of homogeneous factors, can identify and - determine the overcoming of development problems through the joining of common efforts.

Central America was born united. It was during its historically growth that the original union was broken, allowing the sprouting of independent countries. But, even though the nations' identities became permanent as time went on, the sense of unity beyond the borders still remains constant for the future.

Due to geographic, historic, cultural and economic reasons, at present Central America is considered as a sole nation and so there is the idea that the assistance granted to one of the five-member countries to overcome its problems, benefits the whole region. In the same way and with this idea of integration in mind, the prevailing criterion for the region is that violence, poverty and injustice may not be considered as an isolated phenomenon in one country, but rather as a common problem.

For the last 20 years, the Central American countries successfully adopted a cooperation system to reach an effective integration among its member countries. This integration represents the potential for Central America's development. However the variety and complexity of its needs and the cost to carry out its aims, makes it difficult to meet them with the region's own resources. In this regard, the Central American development may be reached only if it has available the effective support of the international community.

Even though the scope of work of CABEI comprises the whole Central American region, for the purpose of the presentation of this brief paper to this Fourth Annual International Shelter Workshop

for Senior Professionals organized and directed by the Office of Housing and Urban Development of the US Agency for International Development, Section I (BACKGROUND INFORMATION ON THE COUNTRY) and Section II (SHELTER SECTOR CHARACTERISTICS) have been referred to as those of Honduras as a good sample of the whole region, because Honduras borders with 3 of the remaining four Central American countries and because the Bank's headquarters are located in Tegucigalpa, its capital city.

B. THE REPUBLIC OF HONDURAS
GEOGRAPHY, GENERAL TERMS

The Republic of Honduras, located in the middle of the Central American isthmus between the Pacific and Atlantic Oceans, has an area of 112,088 square kilometers and borders with the republics of Nicaragua, El Salvador and Guatemala.

The Republic of Honduras is a democratic and independent republic, ruled by a representative government through the legislative, executive and judicial branches.

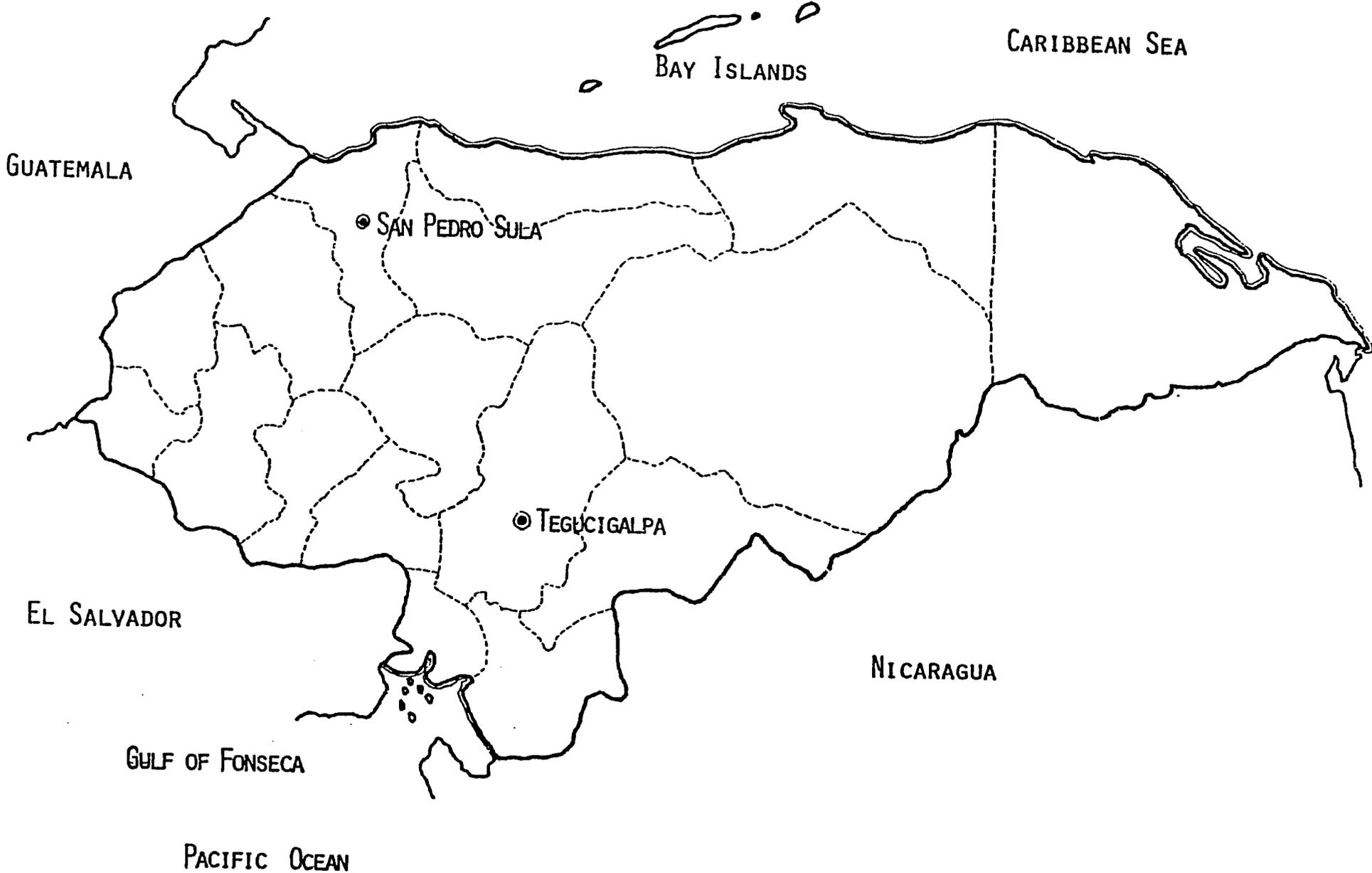
Given its natural characteristics, it is mostly an agricultural country. The major items of its economy are the exportation of bananas, coffee, lumber, sugar, frozen meat and other products, as shown below:

EXPORTS OF MAIN PRODUCTS

1 9 8 1
(million US\$)

<u>Product</u>	<u>Amount</u>	<u>%</u>
Bananas	215.8	27.8
Coffee	172.9	22.2
Lumber	43.2	5.6
Frozen meat	46.3	6.0
Sugar	46.6	6.0
Shrimp and lobster	25.4	3.3
Other	227.4	29.2
	<hr/>	<hr/>
TOTAL	777.6	100.0
	<hr/>	<hr/>

REPUBLIC OF HONDURAS



POPULATION

Based on the 1973 population and housing census and on the estimates performed by the Department of Economic Studies of the Central Bank of Honduras as of 1981, the population of the country reached 3.4 million inhabitants, 36% of which is concentrated in the urban areas and 64% in the rural areas.

NATIONAL POPULATION GROWTH RATE

According to statistical data developed by the Latin American Vital Statistics Center (CELADE), Honduras is one of the most rapidly growing countries with regard to population. Its population growth has been estimated to be 3.47%, as a result of a gross birth rate of 49.3 and a gross death rate of 14.6 per each thousand of inhabitants. Besides, it has been established that Honduras is one of the least urbanized countries of the region, notwithstanding the fact that a growth of 5% has been shown in its urban population.

The capital city of Tegucigalpa has around 502 thousand inhabitants; San Pedro Sula, the second city of the country, where the major industries are located, has a population of 369 thousand.

INCOME DISTRIBUTION BY DECILE OR QUINTILE

Of the five countries of the Central American area, Honduras is the one with the lowest per capita income of US\$530.00.

According to estimates, a monthly average household income are:-
US\$ 181.00 for Tegucigalpa; US\$163.00 for San Pedro Sula and US\$133.00 in other urban areas.

Based on the methodology "Preliminary Description of Methodology for Estimating Household Incomes, January 1980" of the Housing Office of the Agency for International Division, the urban mean household income for Honduras was determined, as follow:

MONTHLY HOUSEHOLD INCOME

IN LEMPIRAS

1 9 8 1

<u>Percentils</u>	<u>Amount</u>
50	810
40	650
25	437

II SHELTER SECTOR CHARACTERISTICS

PATTERNS OF SETTLEMENTS

The country's urbanization is concentrated in the largest population centers, causing that the urban sector grows at a rate of 5.3% while the rural sector grows at 1.8% annually.

Therefore, the departments of the country with a more fast population growth are those located in the areas of highest economic development, both in the industrial and the agricultural fields.

This remarkable concentration in urbanization is causing some kind of metropolization in the two major urban points of the country (Departments of Francisco Morazán and Yoro in the hinterland and Departments of Cortés and Atlántida in the Northern region of Honduras). As these metropolitan areas come forth, they absorb nearby towns, originating satellites with other more distant cities, the formal characteristic of the metropolies being clearly distinguished.

There are some opinions advocating that the solution is not the restriction of urbanization, but rather should be balanced within the space context of the country, thus avoiding that the migrating rural misery be substituted by poverty and slums.

This metropolization phenomenon additionally causes some kind of

illusion which attracts the attention of rural population, thereby activating the unofficial sector in the construction of housing that, without any technical counselling and lacking the basic -- services and communications means, exert pressure on urban areas, seeking the fulfillment of their essential needs.

According to the 1979-1983 National Development Plan prepared by the Superior Council for Economic Planning, during the 1974-1978 period, the trend of population growth settled in urban areas of the country remained constant, especially in those areas already having urban concentrations. The supply of the official housing sector does not show improvement in its performance and therefore housing needs and deficit continue increasing.

It was noted that 85.3 percent of the minimum housing needs corresponds to families having no access to the official housing market.

HOUSING STOCK - CURRENT CONDITION

According to the 1974 housing census, there was a total of 526,566 houses, having the following deficiencies:

- 67.4% had no water supply;
- 67.8% had no sanitary services;
- 41.7% had only one or two rooms;
- 56.1% had inadequate construction (adobe, bahareque, stick, cane or lumber walls, etc.).

Based on the above, the total accumulated deficiency for this year was estimated in 309 thousand units, that is, 59% of the total - inventory. Forecasts for 1979 showed that this figure shall increase to 400 thousand units, of which 22% corresponds to the urban area - and 78% to the rural area, and for 1984 it shall amount to 505 thousand units, 125 thousand corresponding to the urban area and 379 thousand to the rural area.

BUILDING MATERIALS/CONSTRUCTION SYSTEM

Direct researchs performed by specialized agencies reveal that the housing construction industry uses the following main materials:

<u>Item</u>	<u>Material</u>
Walls	Clay bricks and blocks, cement blocks, cement, vinyl paint, plywood, sand and stones, premixed concrete, steel bars, lime, tie wire.
Roofs	Lumber, galvanized sheet, corrugated iron, asbestos-cement, plywood, premixed concrete, cement beams and joists, plastic sheets. Iron bars, tie wire.
Floors	Paving tie, terrazzo brick, lumber.
Doors and windows	Glass, aluminum, iron, lumber.
Streets	Cement, sand, stone and gravel, concrete paving block, cement pipe, premixed concrete.

CONSTRUCTION SYSTEM

The characteristic of Honduran housing construction industry is that it is a labor intensive for semi-specialized workers, who are easily available in the country, as there is a high rate of unemployment and besides the contractors still use the traditional construction system.

The new construction systems such as in-site pre-stressed plates; fiberpanel plates; prefabricated, etc., have been used only in specific projects.

Indeed there has been a very slight technological diversification.

There are 359 construction firms registered in the Honduran Engineers'

Association (CICH), located mainly in the cities of San Pedro Sula and Tegucigalpa, who jointly produced a total of 12.333 houses during the 1957-78 period, at an average of 587 houses per year.

HOUSING DEMAND

The accumulated deficit in 1980 was 419,200 units, 94,600 of which were located in the urban area and 324,600 in the rural area. An estimate investment of US\$2,527.7 million shall be required for the 1981-2000 period.

According to the Housing Policy of the country, the accumulated deficit is sidetracked and only considers as operating and priority the minimum needs resulting from the demographic increase and - obsolescence (2%), which shall cause an annual unbalance from 25 to 27 thousand houses, implying an investment of US\$85.0 million annually, US\$55.0 million corresponding to the urban sector and US\$30 million to the rural sector.

It is noteworthy that both the number of units and the amounts of investment detailed above refer to partially address the minimum housing needs caused by the population growth and obsolescence during the 1982-2000 period, which is convenient in order to sustain the total accumulated housing deficiency implying that if the deficit is not cared for, it shall drastically increase.

In 1979 only 4,978 houses were constructed with an estimate investment of US\$ 39.5 million. The public sector financed 462 houses with an investment of US\$1.8 million and the private sector 4,516 houses, with an investment of US\$ 37.5 million.

The Central American Bank for Economic Integration, through the annual programming and promotion missions carried out in the five-member countries, countries, was able to establish, together with the institutions and agencies involved, a financial demand for housing as follows:

EFFECTIVE DEMAND

(July / June)

- Millions of US\$-

<u>1982/1983</u>	<u>1983/1984</u>	<u>Total</u>	<u>Expected Investment</u>
74.4	83.0	157.4	196.9

From the total of US\$157.4 million, 79.2% corresponds to low income housing and 20.8% to medium income housing, as follows:

<u>Percentiles</u>	<u>Sales Price US\$</u>	<u>Total Million US\$</u>
25-40	5.000	19.0
40-50	6.500	105.6
50 +	12,500	32.8
	<u>Total</u>	<u>157.4</u>

CABEI has granted to the Honduran Savings and Loan System 37 long-term net financings which, as of June 30, 1982, amounted to US\$68.1 million and 11 short-term loans (construction financing) to start urbanization projects, in the amount of US\$3.7 million. These funds shall be used for the construction of 5,256 medium income houses - and 5,953 low income houses respectively.

The financial share of CABEI, although important, alleviate only in part the housing needs of Honduras.

As to the production of housing and needs of the low income households, in a survey performed by the Agency for International Development, the situation found for the country was as follows:

HOUSING PRODUCTION VERSUS NEEDS

(Honduras)

(Low Income Households)

San Pedro Sula and Tegucigalpa					
Income Group by Percentiles	Average need 1974-1979		Units Needs		Production Needs
1. Below the median	4,400	Less than	3,150	670	0.16
2. 45-50	400		2,900 to 3,150	-	
3. 35-45	880		2,500 to 2,900	70	0.07
4. 25-35	880		1,900 to 2,500	600	0.68
5. Below 25	2,200	Less than	1,900	-	-

LAND AVAILABILITY AND TENURE

It is estimated that the capital city of Tegucigalpa has a gross urban area of some 78.2 square kilometers, out of which 30 are considered as the total urbanized area. The urban land demand for the Construction Program in the 1979-1983 period, developed by the Superior Council for Economic Planning, as per income levels, is as follows:

URBAN LAND DEMAND

(. Honduras)

1979-1983

Income	No. of Units	Average useful area per house (hectares)	Percentage
Sub-minimum	-	-	-
Minimum	790	28.9	3.8
Low	1,752	47.9	6.4
Medium low	5,791	137.4	18.4
Medium	5,050	75.3	10.1
Medium/high	10,737	247.1	33.1
High	10,622	211.0	28.2
Total	34,742	747.6	100.0

From the above it is concluded that 28.6% of the land adequate for -

for construction shall be required in this period by low income households and 71.4% by medium and high income households.

The following information was obtained from the same source on possible demand of land for the informal sector for the same period:

LAND DEMAND FOR THE INFORMAL SECTOR

(Honduras)

1979 - 1983

Income	No. of Houses	Urban	Rural	Total	%
Sub-minimum	22,588	114.55	698.62	813.17	44.3
Minimum	19,566	407.38	300.60	707.98	38.5
Low	8,836	193.62	44.96	238.58	13.0
Medium low	3,133	69.79	5.40	75.19	4.1
Medium	96	-	1.44	1.44	0.1
Medium high	32	-	0.74	0.74	-
High	-	-	-	-	-
Total	54,351	785.34	1,051.76	1,837.10	100

In the unofficial sector, 83% of the land demand corresponds to sub-minimum and minimum income households.

NATIONAL DEVELOPMENT PLAN "HOUSING SECTOR"

The National Development Plan, Housing Sector of Honduras, for the 1979/1983 period, prepared by the Technical Secretariat of the Superior Council for Economic Planning, contains the following objectives:

GENERAL OBJECTIVE

Address progressively and integrally the shelter requirements,

extended to the integration of basic services, community development, social and economic facilities essential for the wellbeing of the human settlements, giving priority to those of the lowest income levels.

SPECIFIC OBJECTIVES

- To produce a number of houses and progressive shelter development covering the minimum needs in the period of the plan, - especially those larger groups with less household income.
- Progressively improve of the houses having inadequate living conditions and provide assistance to overcome their "habitat" condition.
- Progressively supply the population centers with the basic community equipment for their adequate development.
- To design a national system for human settlements in accordance with and related to the Regional Development Policy, seeking an adequate occupation of the national territory and overcoming both urban and rural unbalances, between large and small settlements.

OVERALL GOALS

A program of construction of 34,742 houses to benefit some 208,452 families is included in the overall goals.

7.3% of this total shall be used to meet the needs of 2,542 families of low purchasing power.

A total of 591.2 million Lempiras⁽¹⁾ shall be invested during the five-year period.

(1) One dollar (US\$1.00) = 2 lempiras (L.2.00)

24.72% of the minimum shelter needs of the major cities shall be fulfilled.

Besides, a Support Program shall be performed to:

- To improve the housing condition of 20,063 urban families and 35,581 rural families.
- To obtain financing in the amount of 37.5 million Lempiras to support the participation for housing improvement: The amount of 27.0 million Lempiras for the urban area and 10.5 million Lempiras for the rural area.
- To start the construction of 13,191 shelter solutions in the urban area and 2,250 in the rural area.
- To begin the investment in social housing projects in approximately 52.0 million Lempiras, of which 47.0 million lempiras are for the urban sector and 5.0 million Lempiras for the rural sector.

The execution of this program, according to the plan, shall be under the responsibility of the following:

- Instituto de la Vivienda (INVA)
- Sistema Nacional de Ahorro y Préstamo (SNAP) under the management of FINAVI.
- Federación Hondureña de Cooperativas de Vivienda Limitada (FEHCOVIL).
- Asociación de Promoción Humana (APRHU).
- Sector Privado Empresarial Independiente del SNAP. (SPEI).

As for planning, the Program shall be coordinated by the National Housing Committee and the Technical Labor Committee.

In financial matters, the participation of the following international institutions has been considered:

- Agency for International Development (AID)
- Interamerican Savings and Loan Bank (ISLB)
- Interamerican Development Bank (IDB)
- Central American Bank for Economic Integration (CABEI)
- Central government and executing agencies of local entities.

According to the plan, the construction goals shall be in charge of the following agencies:

CONSTRUCTION PROGRAM

By Entities
1979 / 1983

Sector Entities	No. of Houses	%	Total Investment Thousands US\$
<u>Public Sector</u>			
INVA	6,168	17.7	21,401.2
<u>Private Sector</u>			
SNAP	10,966	31.6	94,497.7
SPEI	15,958	46.0	171,577.7
FEHCOVIL	1,165	3.3	6,765.0
APRHU	485	1.4	388.0
	<u>28,574</u>	<u>82.3</u>	<u>273,228.4</u>
TOTAL	34,742	100.0	295,629.6

A BRIEFING ON PUBLIC AND PRIVATE INSTITUTIONS FOR THE HOUSING SECTOR

a) PUBLIC SECTOR

1. Instituto de la Vivienda - INVA -
(Housing Institute)

Is a government agency, established in 1957 as a non-profit organization, with own capital. Its main office is in Tegucigalpa city and has regional offices in the major cities of the country.

Among its main objectives is the promotion of construction of a larger number of low cost houses, rather than a lesser number of higher cost houses. Providing, in this way, a social readjustment of the Honduras as person and households in general. Furthermore it sets forth flexible specifications for urban and rural shelter construction.

In achieving these goals, the INVA develops the construction of housing programs and hygienization, directly or indirectly.

As of this date, the INVA has constructed or financed an estimated of 9,900 houses, with an investment of US\$49.5 million and has granted 1,700 loans in the amount of US\$1.4 million for housing improvements and expansion in the urban areas.

2. Financiera Nacional de la Vivienda - FINAVI -
(Financial Government Agency for Housing)

FINAVI is a public entity with own capital established on March 18, 1975, with central offices in Tegucigalpa city.

Among its main objectives are:

- a) Acts as regulatory agency for the National Savings and Loan System for Housing.
- b) Enforces national credit policy for the purchase, construction, expansion, repairs, modernization and purchase of mortgages, accordingly.
- c) Issues insurance or any other guaranties for the recovery of mortgage loans and to remove liens (in case of mortgagor's death) and other related insurance.
- d) Provides financial support to its member for their - operations.
- e) Purchases and sells mortgage credits produced by the member associations.

FINAVI has participated in the financing an estimated 1,848 houses, with an investment of US\$ 15.0 million.

b) PRIVATE SECTOR

The private sector is formed as follows:

1. Loan and Saving Association for Housing
(FINAVI's affiliated members)

1.1	La Vivienda, S.A.	Tegucigalpa
1.2	Casa Propia, S.A.	Tegucigalpa
1.3	Futuro, S.A.	Tegucigalpa
1.4	Financiera Metropolitana, S.A.	Tegucigalpa
1.5	La Vivienda de Sula, S.A.	San Pedro Sula
1.6	La Constancia, S.A.	San Pedro Sula

The above six (6) institutions are stock companies specialized in housing credit. To carry out their operations they obtain funds from the public and perform financial intermediary and trust transactions.

FINAVI is a regulatory agency for the System, the aforementioned institutions became affiliated members, thus being able to rediscount the mortgage credits they produce, and besides obtain financial support and technical assistance in the development of housing projects.

This System so structured has approved financings for an estimated 3,779 mortgage credits for equal number of houses, requiring an investment of US\$46.6 million. 52% of these houses are located in the city of San Pedro Sula; 16% in Tegucigalpa, 21% in other cities and 11% corresponds to individual credits (non project houses).

2. Banks and banking-related institutions (approved entities)

2.1	Instituto de la Vivienda (INVA)	Tegucigalpa
2.2	Banco de los Trabajadores	Tegucigalpa
2.3	Banco Sogerin, S.A.	San Pedro Sula
2.4	Banco Municipal Autónomo	Tegucigalpa
2.5	Banco de las Fuerzas Armadas, S.A.	Tegucigalpa
2.6	Fundación de Vivienda Mínima de Honduras	Tegucigalpa

According to FINAVI's Constitutive Law, these public and private institutions have, within their organic structure, specialized departments which perform mortgage credit operations for housing, with the same rights and privileges of the affiliated Savings and Loans Associations ("affiliated entities")

3. Federación Hondureña de Cooperativas de Vivienda-FEHCovil-
(Honduran Federation Cooperative for Housing Limited)

FEHCovil started operations in Tegucigalpa on July 1, 1967, it is constituted by nine (9) affiliated housing cooperatives

and one (1) in the process of affiliating. These housing cooperatives are specifically established to meet the housing needs of their members.

The Federation has gained much experience in the cooperative housing field and good reputation in the remaining central american countries.

At present it has granted a total of 2,273 housing credits (occupancy contracts) with an approximate investment of US\$ 12.0 million.

CABEI has approved to FEHCOVIL long-term financings for US\$6.9 million and short-term financings in the amount of US\$ 1.3 million for urbanization work in its projects.

It is a remarkable fact that the houses constructed by FEHCOVIL are assigned to the members at cost price, thus facilitating their purchase and repayment.

Broadly we may observe that the Republic of Honduras has a well consolidated private and public sectors with an ample experience in the housing field. This consolidation has been backed during the past two decades by the Central American Bank for Economic Integration as their main source of funds.

Other government agencies participate in the regulation and supply of public services for new urbanization projects, as detailed below:

1. Concejo Metropolitano del Distrito Central -CMDC-
(Central District Metropolitan Council)

Within the organization of the CMDC, the Petroplan Division, through the Construction Permits Department reviews the urbanization and zoning projects and issues its opinion.

The CMDC grants the final approval for any urbanization project basing its decision both in the opinion of its Construction - Permits Department and in the opinion of other government agencies explained further on (SANAA, ENEE, HONDUTEL).

The construction of streets and access roads shall be made by the owner of the urbanization, according to the specifications required by the Public Works Division of the CMDC which, after three years, are transferred to the CMDC.

The CMDC as a Regulating Agency for Urban Development sets forth laws and regulations for all the urbanization project, as detailed below:

- a) General Zoning Regulations
- b) Urbanization and Plotting Regulations
- c) Construction Regulation.

2. Servicio Autónomo Nacional de Acueductos y Alcantarillados - SANAA-
(National Autonomous Service for Water and Sewerage)

SANAA is a government agency in charge of defining the standards for the potable water and sewerage services for urbanizations - projects previously approved by the CMDC.

The opinion issued by SANAA is needed for the corresponding negotiation of all urbanization projects at the CMDC's Construction Permits Department.

3. Empresa Nacional de Energía Eléctrica - ENEE -
(Electricity National Company)

The ENEE is an autonomous government agency established to supply the electricity service. For new housing projects, the electricity costs are absorbed by the builders and after three years the facilities are also transferred to ENEE.

4. Empresa Hondureña de Telecomunicaciones (HONDUTEL)
(Honduran Telecommunications Company)

HONDUTEL is a governmental autonomous entity in charge of supplying the telephone service and controls the telecommunication network in Honduras.

III. BRIEF DESCRIPTION OF THE CENTRAL AMERICAN BANK FOR ECONOMIC INTEGRATION.

1. NAME AND ADDRESS: Central American Bank for Economic Integration (Banco Centroamericano de Integración Económica). Apartado Postal 772. Tegucigalpa, Honduras, C. A.
2. CONSTITUTION: The Central American Bank for Economic Integration (CABEI) is a multinational institution constituted and founded by the governments of the Republics of Guatemala, El Salvador, Honduras and Nicaragua by Agreement signed on December 13, 1960. The Republic of Costa Rica joined the Agreement on July 27, 1963.
3. ORGANIZATION: The Board of Governors, constituted by the Ministers of Economy and Presidents of the Central Bank of each of the member countries, is the top authority of the Bank, and determines, its overall strategy.

The executive body of the Institution is the five-member Board of Directors, one in behalf of each country, appointed by the Board of Governors, at the proposal of the Governments.

The President of the Bank, who is elected by the Board of Governors, and has been in the past a member of the Board of Directors, acts as President of the latter and is the executive and administrative official of highest position in the Institution.

At the request of the President, the Board of Directors appoints an Executive Vice-President, who is in charge of the direct administration of the Bank. For the management of its operations, the Bank has the following major divisions: Finance, Programming and Promotion, Analysis and Supervision, Administrative, Legal and Audit Departments.

The Bank's headquarters are located in the city of Tegucigalpa, Republic of Honduras, and in order to expedite its operations, it has regional offices in each of the member countries, acting as agencies to handle directly the negotiations of its borrowers and to support headquarters in the performance of all its operations.

The Bank has been able to build up a highly qualified professional staff from the five member countries, which permits the development of its operations with a high spirit of regional responsibility.

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In regard to CABEI's Shelter Program, several operative and specialized areas or units are involved. A Permanent Housing Committee which functions under the Vice-Presidency coordinates all the different activities of the Program. The local institutions wishing to participate in the program must present written applications to the Bank accompanied by the information required. Each institution is required to assume a number of responsibilities for the soundness of the loans made as a result of the Bank's resources including responsibility for servicing of the loan, repayment of monthly quotas of interest and amortization and the housing credit must be insured by a local institute for mortgage insurance.

4. OBJECTIVES: According to the provisions of its Constitutive Agreement, the Bank pursues objectives which shape it as a very special lending institution, for while it promotes balanced economic development, it encourages the regional economic integration among its member countries.

In order to harmonize both purposes, starting from the analysis of the needs of the area, and pursuant to its Constitutive Agreement. The Bank finances mainly the following projects:

- = Infrastructure projects to complete the existing regional systems or offset disparities in basic sectors which impair the balanced development of Central America.
- = Long-term investment projects in industries of regional nature or of interest for the Central American Market, which contribute to increase the goods available for the Central American trade, and for this and the export sector.

- = Coordinated projects of agriculture and live stock specialization aimed at the improvement extension or substitution of fields that lead to a Central American regional supply.
- = Projects of enterprises needing to expand their operations, modernize their processes or change the organization of their production to improve their efficiency and competitive capacity within the Common Market in order to facilitate the Central American free trade.
- = Housing projects for low and middle income population.
- = Projects of services which are essential for the operation of the Common Market.
- = Projects of social impact in the fields of employment and productivity, health, sanitation, nutrition, education and training and rural development.
- = Other productive projects tending to create economic and social reciprocity among the member countries and increase the Central American trade.

5. OPERATIONS:

In achieving the objectives of the Institution, the Bank may perform the following operations:

- a) Study and promote investment opportunities resulting from the economic integration of the member states, establishment proper programming of its activities and the necessary priorities for financing purposes;
- b) Make or participate in long - and medium-term loans;

- c) Issue its own obligations, which may or may not be guaranteed by bonds, securities or mortgages;
- d) Participate in the issuance and placement of all types of credit instruments related to the implementation of its purpose;
- e) Obtain loans, credits and guarantees from Central American, international and foreign finance institutions;
- f) Act as intermediary in the granting of loans and credits to governments, public institutions and private concerns established in the member states. Toward this end it shall collaborate, as advisable, with other Central American, international or foreign institutions and may participate in the preparation of specific projects in this connection;
- g) Guarantee obligations of public institutions or private concerns, up to such amounts and under such terms as determined by the Board of Governors;
- h) Obtain the guarantee of the member states for the contracting of loans and credits from other financing institutions;
- i) Provide, from its own resources or from others obtained for such purpose, executive, administrative or technical advisory assistance to loan applicants;
- j) Carry out all such additional operations as necessary for the furtherance of its objectives and operations.

The Bank provides loans to both public and private sector. Public sector loans have been primarily for the Central American highway network, the regional telecommunications

system and loans for water supply, electrification, silo construction, and preinvestment studies for port and transportation projects. Of the loans to the private sector, main fields have been manufacturing, tourism, housing and intermediate financing.

6. PROGRAMS FOR THE SHELTER SECTOR: The Bank can develop specific programs in cooperation with state agencies for the sectors of low income which are in need of shelter. The program also pursues the following objectives:
 1. To obtain resources and to provide the continuing and permanent maintenance of the financing system through:
 - a) Savings from the Central America Area and from the exterior, including through the emission of bonds and the sale of mortgages;
 - b) International public and bilateral funds;
 - c) Funds or private capital from the exterior such as through the commercial banks, insurance companies, and savings and loan associations of the USA.
 2. Endeavour to promote the adoption of laws, standards and uniform documents for the development and financing low and middle income shelter in the Central American countries. The Bank has taken an active interest in promoting minimum construction standards and regulations.
 3. To provide financing for housing to existing institutions which mobilize savings and which provide direct mortgage credit for the construction of housing and stimulate the creation of new institutions of this type.

4. Increase the competence among the institutions which provide housing credit, and among builders and contractors with the objective of reducing the cost of financing and building of housing.
5. Promote the creation of a Central American Market for construction materials produced on the basis of common modules and contribute in this way to the expansion and improvement of the Central American construction industry.
6. Increase the levels of economic activities in the Central American countries and create opportunities for employment.
7. By all these means to strengthen the independence and integration of the countries of the area as well as commercial Central American interchange.

Through the attention given to the secondary mortgage market in the area, the Bank has promoted the development of housing construction, cooperating thereby to the solution of the serious shelter problem of the region.

7. FINANCIAL RESOURCES: CABEI opened operations with an authorized capital of US\$.16.0 million, as Costa Rica became a member of the Bank. Later on, in 1965, the authorized capital was increased to US\$.40.0 million, and in 1969 to US\$.60.0 million maintaining this figure up to 1978, when it was raised to US\$.200.0 million. Early in 1982 the authorized capital was increased to US\$.600.0 million.

As of May 31, 1982, the capital structure of the Bank showed the following figures:

Capital

Authorized	US\$. 600.0 million
Unsubscribed	<u>240.0 million</u>
Subscribed	US\$. 360.0 million
Subject to call	185.0 million
Called receivable	<u>20.0 million</u>
Paid-up capital	US\$. 155.0 million
General reserve	121.5 million
Grants	5.0 million
Other	<u>0.5 million</u>
Total Capital and Reserves	US\$. 283.0 million

In order to separate the use of its resources, the Bank channels its financing through the following five funds:

- = Ordinary Fund, to finance both the public and private sectors, mainly for industrial projects, agriculture and live stock, tourism, services and other lines of business significantly important for regional development.
- = Central American Fund for Economic Integration, intended to meet the financial needs of the public sector (national government, decentralized entities and enterprises financed jointly by government and private capital), for the execution of projects in the fields of highways, telecommunications, power, education, irrigation, and other fields of investment, aimed at promoting and strengthening the economic integration and balanced development of Central America.
- = The Housing Fund, aimed at providing financial assistance for the construction of shelter for the low and middle

income population, through the purchase of mortgages and or through direct loans.

- = Social Development Fund, established to offer very favorable conditions for the execution of educational, health and sanitation and of economic and social development projects of integral nature, in the rural and urban areas.
- = Central American Fund for the Common Market, established in 1981 with the purpose of financing for the Central Banks of the region, the debit balances of the settlements in the Central American Clearing House. With the establishment of this Fund, the Bank has considerably extended the scope of its operations, marking available to Central America the means to overcome its temporary intraregional balance of payment problems.

Since its inception the Bank has been aware of the fact that, to meet some of the financial needs of the region, it shall have to recourse to raising foreign funds. In this regard, the Bank has carried out a dynamic entry into the world capital markets raising from several countries and financial institutions large amounts of funds that are channeled for the region's development. As of May 31, 1982, the funds obtained by the Bank abroad amount to US\$.1.068.3 million, which, added to its net worth, have allowed the approval of loans for a total of US\$.1.692.6 million, of which US\$.1.086.3 million have been disbursed. The foreign funds above mentioned originated in the following financing institutions:

- Interamerican Development Bank (IDB)
- Agency for International Development (AID)
- Commercial Banks (USA, Europe, Japan)

- Government Banks or Agencies
- Regional Banks

Resources for Human Settlements: The banks has been an important resource for financing housing in the countries of Central America. In all, since the Bank's inception 77 loans have been made, totalling US\$.224.4 million.

Technical Assistance:The Bank has supported research projects and studies related to its objectives. In the housing field, in cooperation with other institutions, it has been an important force for stenghtening construction standards, building codes, financing techniques, etc. The Bank currently serves as Secretariat to the Central American Organization for Housing and Urban Development (COPVIDU).

7. LOAN APPROVAL As of May 31, 1982, the Bank had approved a total of 928 loans, for the sum of US\$.1.692.6 million, to the following sectors:

Sector	No. of Loans	U S \$. Million
TOTAL	928	1.692.6
Agriculture and Fishing	36	62.3
Mining	7	8.3
Manufacturing	319	182.2
Electricity and Water	65	255.7
Infrastructure	186	637.5
Transportation, Storage & Communications	62	135.1
Tourism	81	77.6
Intermediary Fin.	62	53.7
Social Services	30	55.7
Housing	77	224.4

As may be observed, the Bank's financing shows a widely diversified structure, corresponding to the priorities which both the borrowers and the Bank have considered proper for the fulfillment of regional development purposes.

9. DISBURSEMENT AND PORTFOLIO: The amount disbursed by the Bank as of May 31, 1982, is US\$.1.086.3 million, corresponding to 64% of the loans approved as of the same date, this being an indicative factor of the active use of the loans approved.

This dynamism of disbursements, together with the result of loan recoveries (US\$.336.1 million), has developed a portfolio of US\$.741.7 million.

10. OUTLOOK FOR THE FUTURE: In order to meet its objectives and considering the demands of the present condition of the area, the Bank has focused its credit activity within a - Medium-Term Plan, intending thereby to rationalize its financing in a manner that may contribute efficiently and timely to achieve the development goals of the area, by orienting its financing to sectors that strengthen agricultural and industrial production, that bring greater benefits to the Central American population and contribute to the economic and social stabilization of the area.

These purposes imply new quantitative and qualitative needs of funds, which will permit a large share of the Bank in the financing of the area development.

The estimated amount of lending by the Bank to achieve a more significant impact in the area's development, totals US\$.2.000.million, to be granted in the 1981-1986 period.

The sector distribution of this financing is based on a credit strategy oriented towards granting more attention to the region's highest priority sectors, as may be noted in the following table:

**CABEI: STRUCTURE OF LOAN APPROVALS BY SECTORS IN THE
1981 - 1986 PERIOD IN PERCENTAGES**

Sectors	1961-81	1081-82	1982-83	1983-84	1984-85	1985-86
Infrastructure	60.7	49.0	47.0	44.0	40.0	36.0
Agriculture and Fishing	5.2	11.0	11.0	12.0	12.0	14.0
Industry	17.1	14.0	14.6	15.5	16.7	18.0
Housing	14.2	18.0	18.0	18.0	18.0	18.0
Social Development.	2.0	8.0	9.4	10.5	13.3	14.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

To achieve the concretion of the medium-term strategy of the Bank, it is necessary to count with own and foreign resources, according to the following structure:

<u>Origen of Resources</u>	<u>Approvals in the Five-Year Period</u>
Foreign resources	US\$. 1,217.0 million
Net recoveries	US\$. 91.0 million
Profits	US\$. 288.0 million
Required Capital	US\$. 400.0 million
Grants	<u>US\$. 4.0 million</u>
TOTAL	<u>US\$. 2,000.0 million</u>

IV **ANALYSIS AND DEFINITION OF THE APPROPRIATE ROLE**
OF THE PUBLIC AND PRIVATE SECTORS

In the short foreword of this paper, it was mentioned the fact than in a market economy there is an interaction between - producers and consumers, originating a decision system involving both the public and the private sectors.

Market behavior provides options both to private and public - sectors (Mixed Enterprise System) to define its field of action. The government acting as executor, advisor and regulator, - providing national economic development plans and defining - specific and general objectives and establishing the goals for their achievement in every sector of the national economy.

Besides that, a very important part of such plans is devoted to define the scope and role that should be played by both public and private institutions in reaching those goals.

In this mixed economy system, the incentives that moves the private sector are the potential profits shown in the various alternatives offered by the market (supply and demand of goods and/or services). On the other hand, the public sector is in charge of the welfare of the whole community, establishing standards and regulations allowing an adequate and balanced social and economic development of the country, as well as - break-even point between the specific benefit of the enterprise producing the goods and services available in the market and the profit or benefits to be obtained by the remaining population through their use and consumption.

The private sector contributes with its capacity and entrepreneurship to promote and ensure the best use of the production

factors (land, capital and labor), thus guaranteeing the most effective use of resources in the various activities, and a sustained extension of the country's productive capacity as well.

It is worth to be mentioned that the sole existence of a - potential market is not enough to ensure the real operation and existence of such market. Entrepreneurship is required to recognize the real potential of the market. Marketing must appraise and promote the development of such a market. Management, on the other hand, must ensure the effective use of resources devoted to each specific activity. Marketing and management are two important tools that the private sector - uses to perform its role.

Economy entities (individuals, institutions and enterprises), such as the private sectors, are motivated to perform their activities in order to obtain specific benefits or profits. With such purpose in mind, they seek be involved in the activities for which they are best capable, experienced or qualified. This meets the basic economy concept of specialization and division of labor, which considers that economic efficiency is enhanced when such economic entities specialized in those activities where they are best or more efficient.

Efforts of the private sector are mainly concentrated in the production and supply of goods or services having a demand in the market (i.e. furniture, foodstuffs, housing, etc.). This sector is distinguished by a notorious creative, organizational and management capacity, making it more efficient and productive than the public sector both in operations and in the use of basic production factors (land, capital and labor).

Public sector institutions often are affected by technical and administrative problems and not only usually operate inefficiently under low production and productivity, but also seem to be more inefficient as to the moving and channeling of funds. In most instances, such institutions establish operation goals for which the financial, human, institutional and other available resources or whatever they are able to move, are far below the requirements to meet such goals.

Guidance and promotion of the productive activity of the country, as well as the development of policies for the various activities carried out locally, are among the important tasks of the public sector. Furthermore, strong efforts to keep on a follow up on the economic, political and social development of the country. At the same time seeks to improve the standard of living of the population and, on the other hand, promotes the increase of activities towards employment generation.

As far as housing is concerned, the entrepreneurship capacity of the financing institutions for such sector is clearly noted in the special ability which they should have to move the public savings, whether or not said institutions are savings and loan associations, construction firms, national housing banks or any combination of those.

In the housing sector of Honduras, a more efficient guidance and a better coordination between public and private institutions participating in the integral solution of the housing problem has been lacking, to overcome this situation it is needed to - reinforce the capacity and dynamics on this sector. It is also necessary to change the traditional structure of the productive system, as it has continued directing, in a prevailing manner, the housing production, towards the fulfillment of the needs of medium and high income socio-economic population, paying little attention to majority and less income sectors.

INTERRELATION BETWEEN THE PUBLIC AND PRIVATE SECTORS

In a country's development of the various economic activities and specifically in those peculiar of the housing sector, there is a close relation between the public and the private sectors.

In the specific case of housing activities in Honduras, this interrelation is evident through the technical support granted to the sector by the government and the role of guiding and regulating played by institutions such as FINAVI and the Central Bank of Honduras.

As stated above, the private sector is formed by the following entities:

- Sistema Nacional de Ahorro y Préstamo (SNAP)
- Sector Privado Empresarial Independiente SNAP (SPEI)
- Federación Hondureña de Cooperativas de Vivienda, Ltda. (FEHCOVIL)
- Asociación de Promoción Humana (APRHU)

FINAVI participates in the Sistema Nacional de Ahorro y Préstamo (National Savings and Loans System) as regulating agency. All housing savings and loans associations are members of the FINAVI in addition to other institutions involved in housing financing.

As an autonomous public agency, (FINAVI) intervenes jointly with the savings and loans associations (private entrepreneurship), this system may be considered as a mixed enterprise system.

This group of private sector institutions is the market ready to meet the effective demand subject to government's regulations.

Likewise, private system enterprises have some capacity to determine profits expected from funds invested and to - select and qualify the share of such effective demand to be - taken care of, thereby diminishing their investment risks.

Income, financing, type of house to be constructed, households to be served, establishment of terms and profit rates, shall be considered in this qualification. This qualification is deemed necessary as the housing financing, usually, is made on long-term, implying a slow recovery, provoking, in some instances, a lack of liquidity in some degree.

To be in conditions to continue the financing of housing, the private sector institutions shall have to make use of savings funds, as well as of idle cash from the public and; therefore, intermediary financing institutions shall offer special incentives to the owners of such funds. Some of those incentives may be the following:

- a) Safety (savings shall be accesible and safe)
- b) Profit (an adequate compensation, adequate interest)
- c) Access to credit (a special inducement for savers in the possibility of loans for the purchase of housing)

On the other hand, it is important to outline that, quite often, and usually due to political reasons, representatives of the public sector intend to exceed the limits to be performed by governmental agencies and turn it into management of considerable productive operations, resulting in low profits, productivity and excessive paternalism granted to several of such activities.

As an example, in the specific case of the housing sector, very frecuently it is intended to give rise to the idea that

the population of a given country is so poor that has no capacity whatsoever as subject to credit to seek the solution for housing problems and that the only way is that the government develops massive subsidized housing projects.

The National Housing Plan of Honduras for the 1974-1978 period established a goal of 86,432 housing solutions, of which 71,538 units (83%) would be constructed by the public sector and 17%, that is 14,693 by the private sector.

At the end of the aforementioned period, it has been estimated that real production reached only to 28,358 units, that is 32.8% of the projected and of this figure only 16,580 were new units. The private sector constructed 12,333 (74.4%) and the public sector only 4,247 units (25.6%).

The housing sector of Honduras has maintained a low pace of production, with low productivity. The largest production of housing has been concentrated in the major cities of the country.

The private sector continues being the major producer of housing both regarding the number of units and the amount of investment. The role of the construction companies prevails mainly the interest in the production of high cost housing.

On the other hand, the action of the government has achieved small impact regarding the fulfillment of the needs of less income population, while the private sector has not been properly encouraged to participate massively in shelter programs for the poorest.

ROLE OF THE CENTRAL AMERICAN BANK FOR ECONOMIC INTEGRATION (CABEI)

Regionally, Central America, C. A. B. E. I. plays an important role in housing financing. In 1964 the Housing -

Financing Program was established, becoming a regulation as well as catalyser agency which has allowed the formation of new entities and has achieved the consolidation of all national housing savings and loans systems, cooperative federations for housing, official housing institutes, real estate banks, commercial banks (with mortgage department) and other related - institutions.

Annually CABEI performs promotion visits to the Central American countries, in order to get acquainted with the credit demand of the various sectors of their economy.

In the specific case of the housing sector the total demand is obtained, the best developed projects are analyzed and selected together with the involved institutions and then those having the highest priority are determined.

On the other hand, the Board of Directors of CABEI, based on its availabilities, authorizes the funds to be allotted to each sector. These allotment of funds are used to partially finance those priority projects submitted both by the public and the private sectors.

SUMMARY AND SALIENT CONCLUSIONS

In general, the housing sector of Honduras has an adequate and sufficient infrastructure, both in the public and private sectors, to meet housing needs and now, in addition to the traditional institutions, the National Housing Committee (Comité Nacional de Vivienda), organized in 1977, shall be the main Sectorial Coordinator.

The private sector is well represented by several Savings and Loan Associations, that coordinated by FINAVI, form the National/ Savings and Loan System of Honduras.

Therefore, a dual system is available in which the public sector, in addition to participating actively, plays the role of guide of the various activities performed by both sectors in the housing fields.

Notwithstanding the above, more effective guidance and better coordination between public and private entities participating in the integral solution of the housing problem is needed.

In the development of national housing policies, efforts shall be made to give more importance to the sector as a way to improve the standard of living of the population, promote the generation of employment, the attraction of savings and move the national construction industry.

According to the National Development Plan for the 1979/1983 five-year period, a construction goal of 34,742 houses, requiring an approximate investment of US\$295.6 million, was established.

92.4% of the above mentioned goal shall be executed by the private sector and 7.6% by the public sector. In fact, the significant share of the private sector is noteworthy.

It is necessary to change the traditional structures of the housing productive system, which has continued paying more attention to the production of housing for medium income socio-economic groups and little attention to the majority less income sectors.

The umbrella of public and private housing entities shall be extended to meet the needs of both the urban and rural sectors.

In as much as the housing deficit in Honduras has continued growing, it is necessary that the production capacity,

and productivity, of the public and private entities, shall have to be improved. Furthermore, the increase of investment in the housing sector shall have to be encouraged. To this end, it is important to establish a permanent financing foundation, a constant flow. As has been noted in previous years, considerable ups and downs have taken place in the investments for housing.

In the above mentioned plan's goals, the population sector below the 25 percentile of income curve was not included. Around 25% of the urban population lives in temporary shelter, lacking basic services. This situation requires the establishment of an adequate structure that somehow may help solve the housing needs of these population groups.

An adequate and timely solution shall have to be given to the problem of land provision for low-cost housing projects, as this problem is one of the major stranglers of the sector.

The adequate methods and systems to lower the housing production costs and complementary infrastructure costs, shall be revised, adopting frameworks related to experiments and investigation in the production of materials, design and construction techniques, minimum specifications, standardization, modulation, etc.

The construction goal set in the 1979/1983 National Development Plan Housing Sector, requires funds to be achieved, and therefore it considers negotiations with AID, IDB, BIAPE, CABEI and local sources.

The Central American Bank for Economic Integration, as stabilizer agency, participates granting financial support to public and private sectors institutions involved in the housing problem.

In addition to the financial support, CABEI also affords technical assistance to the participating institutions under its Housing Financing Program. This assistance is extended to promoters and contractors of housing projects.

The above shows that positive results may be obtained in the goals established if there is a joint effort and agreement between the institutions of the public and the private sectors.

In consolidating both sectors, the role of CABEI, as catalyzer agent, is outstanding.

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FOURTH ANNUAL SHELTER WORKSHOP FOR SENIOR PROFESSIONALS

THEME: ANALYSIS AND DEFINITION OF APPROPRIATE ROLES
OF PUBLIC AND PRIVATE SECTORS

By: J. Giron Benard
Guatemala
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SHELTER TODAY

Shelter is one of the basic needs of man, and as such, it represents one of the many problems faced by societies of all times.

A massive population growth and an increase in low-income groups are two of the most difficult problems the world has to deal with today. Only recently we started to be concerned with these problems. Because of these problems, the world's population today lives in a situation in which social problems tend to intensify as time goes by. Our complex societies, exposed to the effects of population growth and lack of economic means in order to survive, are forcing humanity and their leaders to face a new challenge. This never-ending prospect of needs is beginning to show the urgent necessity to improve our housing policies and management.

We are suddenly realizing that many countries have started long ago to involve themselves in the maximum use of their resources in order to satisfy their social needs.

Due to the sudden process that generally takes place, cities tend to grow without the means of a proper organization. This helps the development of informal human settlements that represent the misery of a nation. The problem becomes even more complicated when we take into consideration that our population is a mixture of many races with great differences among themselves.

The solution of the housing problems of a population with social, economic and cultural differences, demands a certain amount of knowledge as to how to handle this specific situation. For that purpose it is essential not only to analyze the number of houses that must be constructed to meet the needs but also to evaluate the resources that must be taken into consideration to accomplish

the task. This task makes it necessary to lower the standards of quality in order to solve the individual problems of shelter according to the different economic status of the population.

HOUSE PRODUCTION

As we analyze the figures of house production, we realize that the policies used up to now have not been able to generate proper plans and programs to meet reality. The existing figures of house production do not take into consideration the informal housing construction where it is estimated that 60% of the population live.

The increase in volume due to this type of production is caused by the migration of people to the cities. Due to a lack of social and cultural education, migrants tend to establish themselves in settlements that do not have the minimum requirements of organization and public services to maintain a decent standard of living.

Estimate figures considered that by 1980 the total population would grow to 7 million, out of which 23% live in Guatemala City. This means that in the last 20 years, the city has given shelter to 200,000 new families that somehow have managed to solve their housing needs without the proper guidelines and regulations.

LOW INCOME HOUSING

Guatemala is suffering from a lack of all types of housing solutions, the national production is considered to be half the production of other countries with similar conditions. Due to the country's economic situation, almost all the housing production is to be considered in the low-income range, and a major effort is needed in order to create suitable conditions so as to raise the construction standards as much as to general -- demand permits.

The low-income housing needs have been poorly attended by public sectors, leaving the private sector aside in the formulation of construction policies.

In 1948, the government started to pay attention to this problem through an agency created for that purpose called Departamento de Vivienda Popular, later, in 1956, the Instituto Cooperativo Interamericano de la Vivienda (ICIV) was created with the help of the U.S. Government. In 1956, this agency was transformed into the Instituto Nacional de la Vivienda (INVI) and in 1973 became what is now called Banco Nacional de la Vivienda (BANVI). This agency is the largest and the most important public institution, responsible for executing the government's housing programs through mass production of low-income housing. The existence of other similar institutions has helped create other sources of production in order to relieve the pressure.

The creation of different types of public institutions responds to the different policies carried out by the different governments, in their effort to create better solutions that could gather the help of all production sectors of the country.

The early ICIV concentrated its efforts in creating self construction programs for families of low income, reaching a mean production of 504 houses a year. Subsequently, INVI took over the self-construction programs in 1965 and also began to deal with self-administered projects, reaching by that time a mean yearly production of 1324 houses. The time came when that Institution undertook the construction of 4,000 houses in a 3-year period, then the policies had to be changed in order to get help from the private sector. To be able to accomplish the project in time, 37 different private sector construction companies handled the field work leaving only the management to be handled by the public sector. Because of the positive result of this joint venture, a big finance institution was created, called BANVI. This financial institution

became involved in the execution of mass production projects for low income families with the help of the private sector of the construction industry.

The production of this institution from 1962 to 1972 -- reached a total of 12,734 houses. This production has increased every year, even more after the 1976 earthquake which generated the massive use of informal shelters.

PUBLIC AND PRIVATE SECTORS

The execution of shelter programs in any country should take into consideration the specific needs of the people involved. The public response to that need is far too low and not capable of reaching a definitive solution. For that reason, the help of the private sector is a main necessity.

The shelter problem in the last years has forced governments to make difficult decisions in order to accommodate their housing policies to a growing demand and to fewer economical resources.

Experience has shown that an easy way out is not available, because the factors involved are too complex, the political situation too fluid, and the economical situation too uncertain; therefore, all actions taken are considered insufficient and incompetent.

Being conscious of that situation makes it impossible to believe that the problem could be solved in a short time with the means already available. It is, therefore, necessary to begin a joint and organized participation of all of the production capacities at hand.

It is easy to see how the projects undertaken by the private sector have had more success than those carried out by the public sector. Programs, policies and decisions are more effective when the private sector takes over, and the needs and recommendations of a specific community are taken into consideration.

Shelter programs are the result of political decisions of governments and therefore the state is the principal factor toward accomplishment.

The government's role in the financing of shelter programs should be done by specific policies that create the mechanisms that make it more feasible for the low-income families to buy houses and that increase the participation of the private sector.

Governments all over the world have proven to be poor managers of housing programs and experience has demonstrated that it is more economical to leave the job to other sectors that do not have to deal with institutional conflicts, lack of organization, and no coordination.

For that reason, it is necessary to create practical solutions to help solve the shelter problem we are experiencing by making the public sector combine efforts with the private sector in order to create substantial means of shelter production.

EARTHQUAKE EXPERIENCE

In 1976, the country suffered one of the most severe earthquakes of its history. This experience gave the opportunity to test a joint venture between public and private sectors against disaster. Emergency policies were created in order to face the great shelter shortage. Because of this change in policies, the "LOT WITH SERVICE" was created as part of a new image of shelter solution, helping more than 10,000 families to build a better home than the one they had before. This type of project allowed private and public sectors to work together as a team. On the one hand, the government, through BANVI, was in charge of the organization, promotion, supervision and financing, and, on the other hand, private sector was in charge of field work and construction.

SHELTER POLICY

In the housing industry of underdeveloped countries today the emergency shelter production is very important because the emergency shelters generally constitute permanent houses for most of the low-income families that have migrated from the country to the cities in search of a better standard of living. They settle on the hillsides outside the cities or constitute slums on private or publicly-invaded areas, where there are no public services available. In our country, population growth is considered no less than 2% a year in the rural areas and 4% in the cities. In the slums, the estimated growth is 8% per year.

The pattern followed by low-income settlements is the result of particular historic situations of the country, followed by uneven distribution of resources available in which basic human needs have not been fulfilled properly such as housing, education, food, health and work.

Approximately 60% of the population in Latin America is suffering high rates of urban population growth, a trend that will continue until the end of the century. Low-income settlements represent 59% of the total population of Guatemala City, 30% of Rio de Janeiro, 60% of Bogota and 46% of Mexico City.

Considering these rough figures, it becomes easy to understand the importance of this type of construction in our countries.

It is essential to create new technologies and design alternatives toward a better use of the land in this type of settlements since they represent a formal response to the shelter needs of low-income families.

AN ASSESSMENT OF
GUATEMALA'S
SHELTER SECTOR

This Document Has Been Prepared for
Guatemala's Country Presentation at
the Fourth Annual International ---
Shelter Sector Workshop for Senior
Professionals, Washington D.C. USA
October 25-November 20, 1982. -----
JULIAN I. MARTINEZ

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I. GUATEMALA, GENERAL INFORMATION.

1. GEOGRAPHICAL DATA.

1.1.1 Situation.- Guatemala, one of the five republics of Central America (excluding Panama) is located at the western end of the Central American isthmus and its limits are:

to the north and west: Mexico

to the east: Belize, the Caribbean Sea, Honduras and El Salvador

to the south: the Pacific Ocean

1.1.2 Area: 108,889 square kms.

1.1.3 Geographic regions.- There are five basic regions in the country according to their geographic conformation:

1.1.3.1 Peten.- This vast and karstic flatland in the north of the country, is part of the Yucatan peninsula and is mostly covered by tropical rainforest and grassland. Wide and placid rivers flow through this region, that also includes numerous lakes and lagoons. Temperatures in this area are normally high with a minimum average of 20°C. and a maximum average of 30°C. Rains pour down all over this region almost year round, with an average annual precipitation of 2,000 mm. Altitudes in this area range between 0 and 200 mts. for most of the zone, but some elevations can be found at the Maya Mountains at the southeast of the region where altitudes range between 200 and 1,000 mts. Percentage of humidity for the area ranges between 60 and 80.

1.1.3.2 The Northern Highlands.- A series of rough, forest covered, astounding mountain ranges resting along the north central part of the country between Peten or the Mexican border and

the Motagua river.

This region stretches from Mexico in the west to the -
Caribbean Sea in the east of the country. Most waterways
in this area are rushy mountain streams, except for a few
important rivers that strive their way to the coast through
canyons and gorges caved on the rock. Average minimum --
temperatures vary from a cold 5°C at Huehuetenango's Cuchu-
matanes range to a mild 20°C in Alta Verapaz, while average
maximum temperatures are around 25°C all over the region.
The percentage of humidity for the area goes from 60 to 70.
Rainy seasons here are long and annual precipitation varies
between 2,000 mm and 4,000 mm, and altitudes range between
1,000 and 3,000 mts.

1.1.3.3 The Central Highlands.- This region as the Northern High-
lands, is a continuation of the Sierra Madre mountain system
in Mexico going through the country in a west to east --
direction from Mexico to Honduras and El Salvador. It shows
an alternative landscape of pine covered mountain ranges -
and fertile valleys. This area is full of cone shaped --
volcanoes and crater-like lakes that reflect its seismic -
activity. A rainy season strikes the area from may to october
leaving the remaining six months for cloud-free skys and -
tempered weather. Average annual precipitation varies from
1,200 mm to 4,000 mm. Temperatures here rank between cold -
and mild with an average minimum of 5°-15°C and average -

maximum of 20°-25°C. The percentage of humidity for this area ranks between 50 and 60.

1. 1.3.4 The semiarid region.- This area lies between the Northern and Central Highlands presenting dry desert-like landscapes of scarce vegetation and sandy soils. Except for the Motagua river that flows along this region providing its only fertile land on its banks, most waterways are seasonal creeks that remain dry during great part of the year. Temperatures are extreme with an average minimum of 15°C to an average maximum of 30°C and these two figures can be minimum and maximum temperatures of a single day. Rainy season is short - (45 to 60 days per annum) and average annual precipitation varies between 400 and 1,000 mm.

Altitudes in this area range from 200 to 1,000 mts. The percentage of humidity never reaches 50%.

1. 1.3.5 The Southern Coast.- A strip of fertile lowlands of tropical vegetation, that extends between the mountain ranges and the shores of the Pacific Ocean, this region is the most important agricultural and cattle raising zone in the country. All rivers flowing down from the highlands towards the coast pass through the area assuring water supply for crops even during the dry months. Rainy season stretches from early May to late November with an average annual precipitation of 2,500 mm. Temperatures are warm or even hot, with a minimum average of 20°C and the maximum average of 35°C. This region is almost entirely flat with altitudes variations between 0 to 200 mts.

The percentage of humidity varies between 60 at the -- mountains footsteps to 80 or even 90 at the shores of the ocean.

1.1.4 Population.

1.1.4.1 Total Population : 7,000,000*

1.1.4.2 Rural Population : 4,270,000 (61% of total pop.)

1.1.4.3 Urban Population : 2,730,000 (39% of total pop.)

1.1.4.4 Population of metropolitan Guatemala City: 1,300,000 (18,5% of Tot. Pop.)

1.1.4.5 Indigenous Population: 4,300,000⁺ (62% of total pop.)

1.1.4.6 Non indigenous (ladino) population: 2,700,000 (48% of Tot. Pop)

1.1.4.7 Population per square kilometer 64.3. Although it varies - from one region to an other, thus Peten has 2 persons per sq. km., the Northern Highlands 47.5, the Central Highlands 127.7 the Semiarid Region 65, the Southern Coast 88 and the Departamento of Guatemala 691 inhabitants per sq. km.

1.1.4.8 Population by age⁺

years of age	population	Percentage of Total Pop.
0 - 6	1,582,000	22.6
7 - 12	1,092,000	15.6
13 - 19	1,064,000	15.2
20 - 64	3,045,000	43.5
65 and more	217,000	3.1
TOTAL	7,000,000	100.0

Guatemala has a young population, 53.4% of total popu-- lation is under twenty years of age and more than two - thirds of total population is under 30 years of age.

. All Geographical data from National Geographic Institute. Guatemala
* CEPAL (ECLA) Seminario sobre Pobreza y Grado de Satisfacción de las Necesidades Básicas en el Istmo Centroamericano (1981).

+ Estimated.

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1.1.4.9 National population growth rate: 29 per thousand inhabitants.

Birth rate: 36.97 per thousand inhabitants

Death rate: 12.74 per thousand inhabitants

1.1.5 Economy.

1.1.5.1 Labor Force

Total labor force: 2,100,000* or 30.5% of total population

Working in agriculture: 58.2% of total labor force*

Working in industry and energy: 17.7% of total labor force*

Working in commerce and services: 24.1% of total labor force*

1.1.5.2 Income distribution by deciles in Quetzales (One Quetzal=One U.S. Dollar).

Tenths	Per Capita Monthly Income (average)	Family Monthly Income	Annual Family Income
I	10.11	45.19	542.28
II	16.99	75.94	911.28
III	20.49	91.59	1,099.08
IV	24.01	107.32	1,287.84
V	27.58	123.28	1,479.36
VI	31.17	139.33	1,671.96
VII	33.30	148.85	1,786.20
VIII	34.01	152.02	1,824.24
IX	45.20	202.45	2,429.40
X	71.20	318.26	3,819.12

.La Distribución del Ingreso en Guatemala, Evelyn Klussmann. 1973.

1.1.5.3 Gross domestic product US\$ 3,130.2* (in millions of 1958)

1.1.5.4 Value of exports (1981) US\$ 1,533.9*

1.1.5.5 Value of imports (1981) US\$ 2,189.6*

1.1.5.6 Inflation rate: (1981) 11.4%* (consumer price index)

1.1.5.7 Major Export Products : Coffee, cotton, sugar, meat.

* CEPAL (ECLA) Seminario sobre Pobreza y Grado de Satisfacción de las Necesidades Básicas en el Istmo Centroamericano (1981).

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1.1.6 Education: Elementary school is free-charged and compulsory - between ages 7 and 14. In 1978 10.7% of the National budget was assigned to education.

1.1.6.1 Elementary school attendance*

Rural	% of rural pop. on ages 7 - 14	Urban	% of Urban pop. on ages 7 - 14
375,117	52	295,030	79

1.1.6.2 Secondary school attendance* 135,801

1.1.6.3 Vocational school attendance* 3,276

1.1.6.4 There are five universities in the Country with an -- attendance of 50,000 students , One of these institutions, the Universidad de San Carlos was founded in 1676.

1.1.6.5 The percentage of illiterate population is 54.4% for the whole country, but this percentage is 68.2 for rural areas and 77.6 for indigenous population.

1.1.7 Health.**

1.1.7.1 Number of medical doctors by 10,000 inhabitants: 2.5

1.1.7.2 Total number of medical doctors (1973): 1,310

1.1.7.3 Total number of dentists (1973): 302

1.1.7.4 Total number of nurses (1973): 6,535

1.1.7.5 Number of hospital beds by 1,000 inhabitants: 1.9

1.1.7.6 Death rate by thousand children under one year of age: 83-46% of all deaths are of children under four years of age.

* CEPAL (ECLA) Seminario sobre Pobreza y Grado de Satisfacción de las Necesidades Básicas en el Istmo Centroamericano (1981).

** All Health information from National Census 1973.

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II. SHELTER SECTOR CHARACTERISTICS.

2.1. SETTLEMENT PATTERNS.

As we could see in paragraph 1.1.4, distribution of population in Guatemala is quite uneven. This settlement pattern is the direct result of social and economical conditions, which pull people towards certain zones or places or keep them in their traditional regions or towns. There is not a private or public policy that might orientate human settlement into a more balanced situation.

There are over populated zones with scarce resources, and other places which are plenty of resources with a small number of inhabitants. It is also clear that the most energetic activities tend to gather around Guatemala City (which concentrates more than 13% of total population), while large portions of the rural population live in small farms dispersed over extended areas. Support infrastructure for industry and living is also concentrated in or around Guatemala City, causing that more than 1,200 out of 2,000 industrial centers in the Country (1973) are located in the City, generating 70% of the gross industrial added value. Concentration of commercial enterprises is also evident, and according to the Ministry of Health 52.5% of all hospital beds in the country and 62% of all medical consultations in the nation are reported in Guatemala City. Elementary education in the City covers 70% of the demand for such an education, while schools in the rest of the country cover a mere 46% of their demand. Guatemala City's secondary school facilities count for more than fifty

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per cent of all students attending such educational level in the country.

Consequently, Guatemala City's population grows faster than any other place in the country (except of Peten and Izabal) due to the attraction its benefits draw in rural population, and this boom produced serious problems in sanitation, health, education, housing, and transportation which primarily affect low income population.

2.1.1 Human Settlements.

2.1.1.1 Urban Settlements.- The metropolitan area of Guatemala - City concentrate 44% of the country's urban population, and it is 17 times more populated than Quetzaltenango, - the second largest city.

19 Major centers have a population over 10,000 inhabitants, but all of them are under 100,000 people.

695 regional centers are between 1,000 and 10,000 inhabitants.

2.1.1.2 Rural Settlements.- 1,400 villages with a population - between 400 and 1,000 inhabitants.

3,000 hamlets varying between 200 and 400 inhabitants.

12,900 clusters under 200 inhabitants.

2.1.2 Migrations.

Although birth rates are higher in rural areas, urban growth of population shows higher figures because of migration, this particular factor reflects great mobility of the population.

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These migrations can be explained by the fact that young people from rural areas are attracted by cities and towns which -- apparently offer better employment opportunities, better education facilities for their children, and better services; but can also be the result of the concentration of properties and production assets, low productivity in certain zones, and substitution of human labor by modern technology in big farms.

The most attractive departamentos for migrants, which therefore show positive population growth are Peten (30.8%) (in this particular case, migration is increased by colonization programs), Izabal (10.7%), Guatemala (5.6%), Escuintla (2.1%).

On the other hand, the departamentos that contribute more to these migration flow, showing negative population growth, are El Progreso (-6.18%), Zacapa (-6.16%), Chiquimula (-5.9%), Baja Verapaz (-4.25%), Santa Rosa (-3.5%) and San Marcos (-2.29%).

It is interesting to point out that El Progreso, Zacapa, Chiquimula and Baja Verapaz conform the Semiarid Region.

One important characteristic of these migration flows is that in most cases it takes different steps: from the countryside to small towns and then into bigger cities. Consequently, certain towns show high rates of immigration, and at the same time high rates of emigration. That is the case of Escuintla, a city in the Southern Coast where immigration between 1969 and 1979 showed a figure of 27,500 new residents, and emigration figure for the same period was 22,000.

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2.2 HOUSING STOCK

According to 1973 National Census there was a total of 1,013,817 housing units in the country, for a total population of 5,030,133 inhabitants. There is not an updated figure for present day housing stock, but based upon the increase of population during these years it can be estimated a total of 1,410,870 units for the whole country. Urban stock counts for 34% of total number of units, that is that 479,695 units are in cities and towns over 1000 inhabitants and 931,175 units correspond to small villages and dispersed farmhouses.

2.2.1 CONSTRUCTION PATTERNS

Depending upon its construction pattern and size, these housing units can be classified in the following categories:

a) Single house :

One or several rooms that according to its or their construction pattern, is designed to shelter a single family group.

b) Apartment :

Same as Single House but included in a complex of similar units as in a building or cluster.

c) Tenement House Room :

A room in a large house divided into several units of this type in order to rent them to independent family groups.

d) Cabin :

Single House, usually rural, which has been built with locally-found, natural materials like mud, straw, cane, logs, timber,

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stone, etc.

e) Shack :

A provisional or temporary house built with waste materials, as those used by families in squatter settlements.

f) Others :

In this classification are included all other units as tents, boats, sheds, boothes, natural shelters, vehicles, etc.

1973 National Census figures showed the following percentages of units, according to the above mentioned classification, for urban and rural stock.

PERCENTAGE BY TYPE OF UNIT.

	Single House	Apart- ment	Tenement Hs. Room	Cabin	Shack
URBAN	73.62	4.98	11.70	6.00	3.53
RURAL	60.51	0.42	0.84	36.46	1.57
TOTAL	67.07	2.70	6.27	21.23	2.55

2.2.2 TENURE OF HOUSING UNITS

Depending upon its tenure, housing stock can be classified in: totally paid units, units under a payment process, rented units, and lent units.

1973 percentages were as follows :

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PERCENTAGE BY TENURE.

	Totally Paid	Under Payment	Rented	Lent
URBAN	44.13	7.83	31.26	13.10
RURAL	58.64	0.76	2.02	34.35
TOTAL	51.39	4.30	16.64	23.72

These figures should have significantly changed after 1976 - earthquake, mainly those of the under payment type, since more than eighty thousand new houses were built in the following three years by the government and private institutions as well, and the majority of the new units were sold under monthly installment plans, with a payment period that varied from ten to twenty years.

This is specially significant for rural areas where long term payment plans were almost unknown before the reconstruction process, and - more than half of all new units were assigned to such areas.

2.2.3 LIVING STANDARDS OF HOUSING STOCK.

Water service. 54% of total housing units obtain their water supply from water wells, rivers, lakes or springs. In rural areas 80% of the units obtain their water supply from these sources. 82% of the urban units and 43% of the rural units are connected to private or municipal water networks.

Energy. 50% of all units use kerosene and wood for lighting and cooking - - while 28% use electricity for the same purposes.

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Sewage. 59% of all units (84% in rural areas) lack any sewage system. Septic tanks are used by 19% of all units, in urban areas -- this type of sewage is used by 30% of the units. A mere 15% of all houses in the country have water closets connected to public networks.

Overcrowding. If it is considered that a room of 9 sq. mts. is -- overcrowded when more than three people live in it, 59% of all -- houses in the country (67% in rural areas) are overcrowded.

Number of rooms. Considering a room as a living space of a mini-- mum of 4 sq. mts. 41% of all houses has two rooms, 30% one room - and 14% has three rooms. Most of these rooms are used as bedrooms and in second place as cooking/eating spaces.

2.2.4 PRODUCTION PATTERNS.

Through the years, the construction of houses in Guatemala has -- been carried out under two definite modalities: the formal modality and the informal one.

The formal modality includes all constructions made by trained -- technicians, using appropriate materials and safe building methods. This modality has normally had access to credits, their own financial resources and has followed more or less, the trends of modern construction throughout the world.

The informal modality otherwise, has been the expontaneous answer to housing needs of large sectors of the population that lack financial resources to afford payment for a well designed, safely - constructed house.

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As it may certainly be supposed, the majority of the houses built in Guatemala are the product of the informal modality of construction. According to the publication "El Problema de la Vivienda Popular en Guatemala" (CIVDU, CIID, SIAP, IDESAC, 1978), the informal modality is responsible for 70.6% of all houses built in Guatemala City. Although there is not a similar study for the rest of the country, it can be assumed that figures must be higher for such areas.

Between 1973 and 1975, 9500 houses were built under the formal modality, while the informal modality produced 23000 units during the same period.

This tendency suffered a significant change after 1976 earthquake due to reconstruction activity, which generated an increase in public and private investment in housing. Between 1977 and 1979 the formal modality was responsible for the construction of an average of 20000 units a year.

Once again after 1979 the production of houses under the formal modality decreased as a result of local political instability, -- high interest rates for international credits, and a severe crisis in country's economy due to the descent of international prices for Guatemala's main exports.

The formal modality includes two different sectors, the public sector and the private one. The private sector is formed by construction companies, construction materials industries, construction related professionals, and private banking. Most of the product of

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the private sector is aimed to meet the demand of middle and upper strata of the population, however, the present economical crisis - is increasingly leading private contractors to attend lower income sectors of the population, and new private managed projects for - these sectors are now sprouting in several places.

The production figures of the private sector in Guatemala during the last ten years are as follows:

PERIOD	NUMBER OF UNITS PER ANNUM
1972-1975	Between 2100 and 2612
1976	2731
1977	2685
1978	2124
1979	2043
1980	1421
1981	2089

In respect to the public sector, until 1976, the production of - houses was the exclusive competence of the National Bank of -- Housing -BANVI- which produced 1558 units in 1974, 1192 units in 1975, and 1280 in 1976.

From 1976, because of the quake, it can be observed an increase of housing production due to reconstruction programs, under the coordination of the National Committee of Reconstruction -CRN-. This coordination was responsible for the construction of 48,231 units in 1976.

To manage reconstruction programs, two new offices were created, one of them inside BANVI, to attend programs in Metropolitan Guatemala City and ten provincial capitals, and the other one, as a

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housing department in the National Bank for Agriculture Development -BANDESA-.

The last one aimed to attend housing programs for rural areas. Most of the projects realized by BANVI Reconstruction, were urban complexes for low income families who invaded private or public land after the quake. These projects were the first in the -- country to include such modalities as Site and Services, Basic Units, Core Houses, etc.

Early this year BANVI's projects has provided a definitive solution for 20000 affected families.

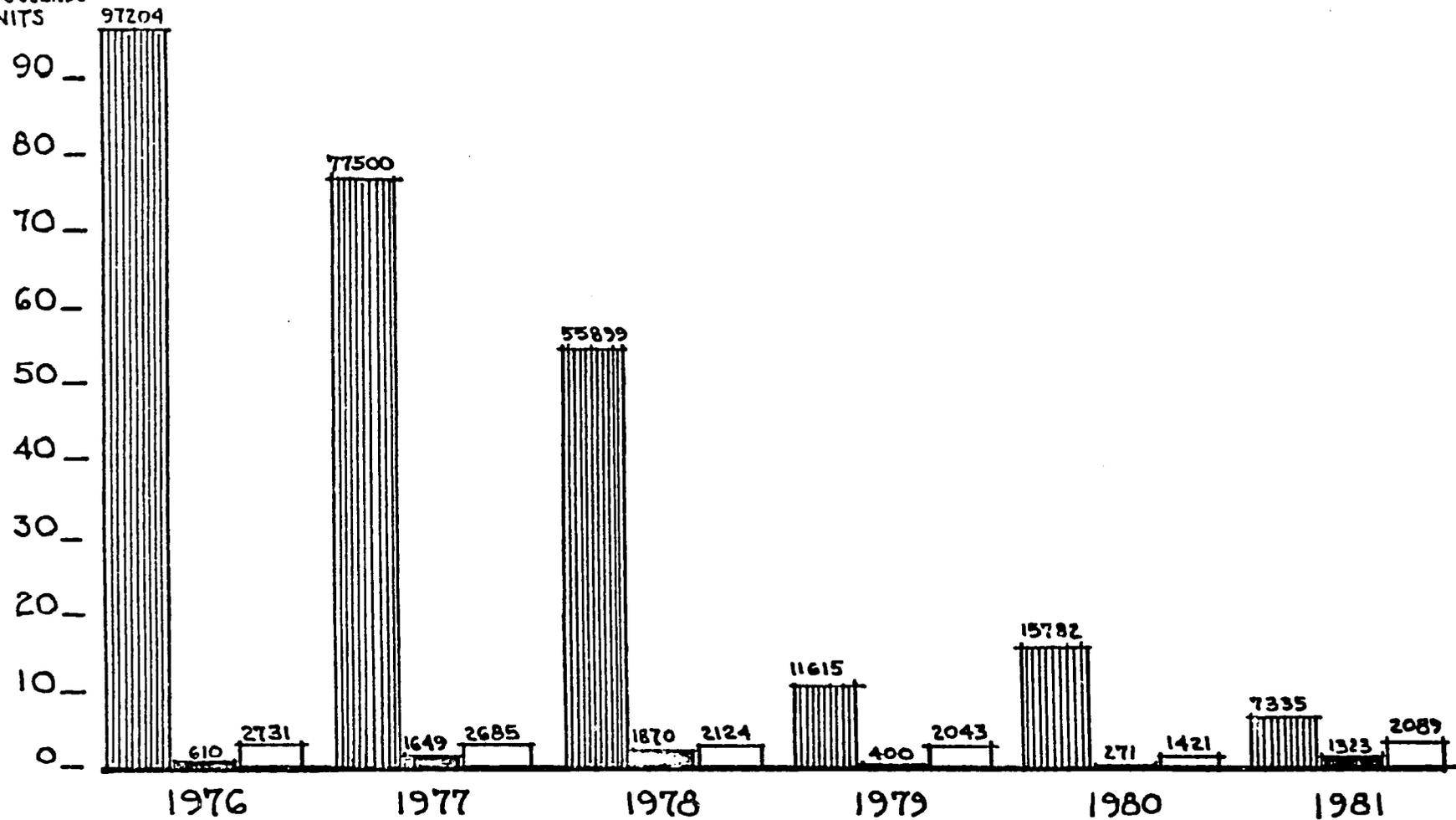
BANDESA's program, on the other hand, attended rural families - who already owned their own lot, and had lost their house during the quake. Consequently this program consisted of individual - credits, that included construction supervision by the agency - technicians, and allowed families to build the house under their own management. By the end of 1982, BANDESA will have granted - 64,981 credits of this type, in one of the most successful housing programs ever realized in the country.

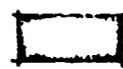
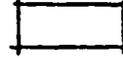
Other successful program coordinated by the CRN during these -- reconstruction years, has been carried out by approximatedly 40 private voluntary agencies, usually called NGO, (for Non Governmental Organizations) which are responsable for 28,000 units, built after the quake, with a strong participation of the benefited -- families. The most important NGO which worked or are still working in housing projects are: Caritas, World Neighbours, Fundación del

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HOUSING PRODUCTION IN GUATEMALA 1976-1981

HOUSING PRODUCTION IN THOUSANDS OF UNITS



-  BASIC HOUSING (INCLUDING SITES AND SERVICES) GOVERNMENTALLY PRODUCED OR COORDINATED
-  MIDDLE HOUSING GOVERNMENTALLY PRODUCED OR COORDINATED
-  ALL PRIVATELY PRODUCED HOUSING

SOURCE: DEPARTMENT OF HOUSING, GENERAL SECRETARIAT OF THE NATIONAL COUNCIL OF ECONOMICAL PLANNING, BASED ON REPORTS OF BANVI, BANDESA, CRN AND BANK OF GUATEMALA.

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Centavo, IDESAC, Save the Children, Hogar y Desarrollo, The Swiss Disaster Relief, Church World Service and The Norwegian Church Aid.

2.2.5 HOUSING DEFICIT.

Litterally, the housing deficit is the difference between the number of households and the number of existing houses. This is a quantitative deficit. But there is also a qualitative deficit that includes all houses that do not meet minimum requirements for adequate human living.

Guatemala's housing deficit is mostly a qualitative one, which means that the majority of the houses built in this country, do not satisfy the minimum needs of their inhabitants.

As long as updated information is scarce or null, housing deficit - calculations differ from one source to another, here we will consider three different figures from three different institutions, in order to show an approximate situation of the housing deficit.

The Department of Housing at the General Secretariat of the National Council of Planning estimated national housing deficit in 1980 in - 486,835 units, considering a deficit of 747,000 units for the end of the century.

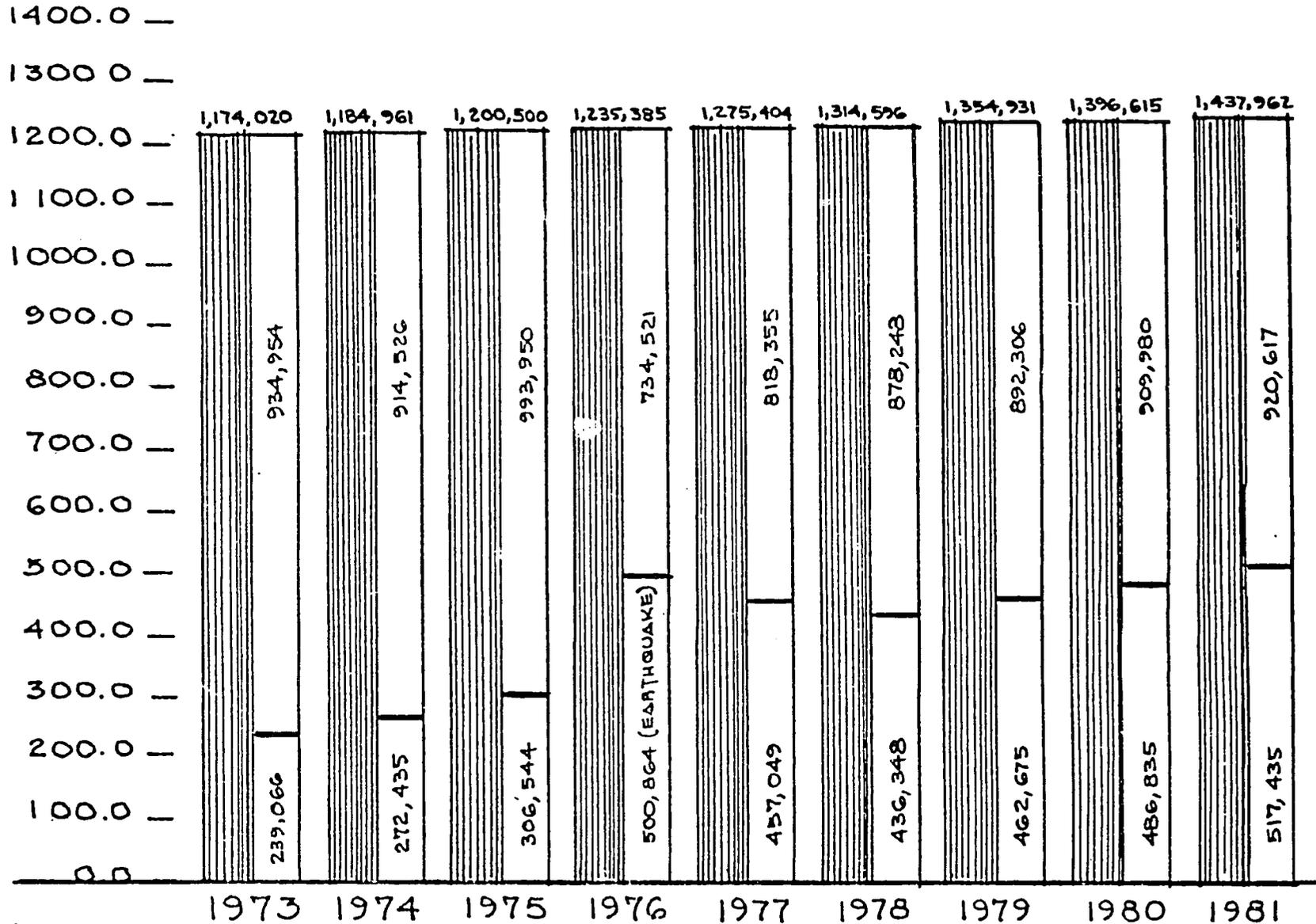
Bank of Guatemala's (central bank) Division for Economical Studies estimated 1980 deficit in 659,169 units, and the figure for the year 2000 in 894,114.

Finally, analyses made by the Housing Investigation Division at the National Bank for Housing -BANVI- estimated the global housing deficit for 1980 in 981,269 units, and 1,570,805 units at the end of the century.

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HOUSING DEFICIT IN GUATEMALA

NUMBER OF HOMES
(IN THOUSANDS)



TOTAL NUMBER OF HOMES
 HOMES WITH HOUSING
 HOMES WITHOUT HOUSING

SOURCE: DEPARTMENT OF HOUSING,
GENERAL SECRETARIAT OF THE
NATIONAL COUNCIL OF ECONOMICAL
PLANNING - SGCNPE

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Everyone of the estimations cited above are based in particular criteria and respond to different approaches to the same reality. In any case, no matter which estimation is more accurate the proportions of the deficit are completely out of control.

2.3 CONSTRUCTION MATERIALS.

In Prehispanic Guatemala most of the houses were built with walls made of cane and thatched roofs. All these materials were easily obtained in the surrounding environment, and its constructive technique was extremely simple.

After the conquest the Spaniards introduced new techniques like - adobe and brick for walls and tile for the roofs.

Although this adobe-tile technique is not the best option for a - seismic country like Guatemala, it is excellent to moderate climate extremes, even more if it is accompanied by a design that includes central patios and their surrounding corridors.

With the arrival of the coffee-growers germans, during the second half of the last century, and the banana company at the begining - of this century, foreign techniques are introduced again in several zones of the country. These techniques includes timber structures for the walls and corrugated tin sheets for the roof. These materials, imported in most of the cases, were rapidly adopted by national upper classes, influencing in many aspects their "tastes" in housing prototypes.

In the years that preceded the quake, the construction of formal - housing in the country was already employing modern techniques, -

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either for design or for construction. Industrialized materials like portland cement, concrete blocks, steel made structures, tin sheets, aluminum windows, etc. were normally used, and most of them were locally produced, though in many cases industries used imported raw materials. Prefabricated methods were also employed including precast panels for walls, and prestressed structural elements in high-rise building, bridges, etc.

Nevertheless , the informal modality of construction, which as we mentioned before is responsible for 70% of all constructions, was still using traditional systems like adobe walls - tile roofs, cane walls - thatched roofs, wattle and daub walls - tile or -- thatched roofs, timber or logs for walls and tile or thatched - roofs, etc.

The following table shows percentage of housing units according to the materials they used for walls, as it appeared in 1973 - national census.

PERCENTAGE OF HOUSING UNITS ACCORDING TO THEIR WALLS
MATERIALS (1973)

	BRICK OR BLOCK	ADOBE	TIMBER	WATTLE AND DAUB	LOGS - CANE
URBAN	19.64	51.45	15.48	5.32	6.67
RURAL	2.64	32.68	18.09	13.96	30.89
TOTAL	8.61	39.23	17.19	10.94	22.44

According to the materials used for roofs 1973 census showed the following percentages.

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PERCENTAGES OF HOUSING UNITS ACCORDING TO THEIR
ROOFS MATERIALS (1973)

TIN SHEETS	TILE	THATCH	CONCRETE SLAB
33.90	27.9	29.5	7%

During the quake unappropriate techniques used in adobe-tile construction, caused the destruction of more than 90% of all unit of this type in the affected areas.

As a result of this catastrophe, adobe - tile system was signaled as extremely dangerous by the population and the authorities as well.

All over the affected areas new houses were built in most of the - cases, of concrete block walls and tin sheet roof, changes in construction material were obvious everywhere.

According to "Guatemalan Earthquake Study" (Substantive Report No. 2) an study of the changes in housing characteristics in seventeen guatemalan communities following the earthquake, prepared by Frederick L. Bates (University of Georgia), W. Timothy Farrell (Instituto de Nutrición de Centroamérica y Panamá) and Jo Ann K. Glittenberg (University of Colorado), the use of materials for walls and roofs in these mentioned seventeen communities was a follows.

PRE- AND POST- EARTHQUAKE WALL TYPES (PERCENTAGES)

MATERIAL	GUATEMALA CITY		HIGHLANDS		EAST		TOTAL	
	PREQUAKE	POSTQUAKE	PREQUAKE	POSTQUAKE	PREQUAKE	POSTQUAKE	PREQUAKE	POSTQUAKE
Patch Work	3.1	14.1	0.2	11.0	0.7	4.5	1.2	10.2
Cane	1.9	0.0	2.2	8.4	6.1	11.8	2.8	6.8
Wattle and Daub	0.9	0.0	3.7	3.2	12.6	12.5	5.3	4.8
Cast Mud Walls	0.0	0.0	1.1	1.0	0.3	0.0	0.6	0.1
Wood	15.0	31.6	1.1	26.9	1.0	28.4	5.2	28.7
Half Adobe	1.3	0.0	0.2	18.3	0.3	3.5	0.6	8.8
Half Block	0.6	0.0	0.4	5.2	0.0	2.4	0.4	2.9
Adobe	64.4	0.0	88.3	5.2	76.8	-22.1	78.4	8.2
Concrete Block	10.9	46.9	2.4	19.8	2.0	14.2	4.9	26.4

PRE- AND POST- EARTHQUAKE ROOF TYPES

MATERIAL	GUATEMALA CITY		HIGHLANDS		EAST		TOTAL	
	PREQUAKE	POSTQUAKE	PREQUAKE	POSTQUAKE	PREQUAKE	POSTQUAKE	PREQUAKE	POSTQUAKE
Thatch	0.9	0.0	4.3	2.6	13.7	7.9	5.9	3.3
Wood	0.0	0.0	0.2	0.0	0.3	0.3	0.2	1.1
Tile	7.8	0.0	48.7	3.5	79.9	28.3	42.8	9.1
Tin Sheets	85.9	100.0	45.2	81.5	12.3	49.3	48.4	78.3
Asbesto Sheets	3.1	0.0	0.9	10.3	1.0	9.0	1.6	6.9
Concrete Slab	1.6	0.0	0.4	0.4	0.7	1.4	0.8	0.6

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Although the data showed above has been drawn from the preliminary report and therefore they should be regarded as tentative until a full analysis has been completed, they reflect more or less the tendency in construction materials changes after 1976 earthquake. It is obvious that meanwhile adobe and tile was favorite construction system before the quake, they have been substituted by concrete block, wood and tin sheets in the builders preferences. It is also obvious that tin sheet roof were also popular before the quake, and it can be assumed that the substitution of tile by tin sheet as favorite roofing material had started before the quake which was just an accelerator of the process.

At this moment, it is important to point out that, as long as the informal modality is still responsible for most of the units built, this new materials and construction system are not always used with the appropriate techniques, so as it happened before with the adobe-tile system, most of the units being built, no matter if they are made of concrete block or steel frames, they are not guaranteed against seismic risks.

2.3.2 CONSTRUCTION MATERIALS INDUSTRY.

According to the survey made by the publication Directorio Nacional de Establecimientos Industriales de Guatemala (National Office of Statistic 1976), there were 502 industrial centers which produced materials or commodities for the construction industry. This number represented 25% of all producing units of the country's industrial sector.

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Industries grouped in the construction sector included factories of paints, varnish, clay products, bricks, tiles, non metallic - mineral products, blocks, sinks, pipes, mosaics, iron and steel - products, tools, structural elements, and construction machinery and equipment.

Major construction materials produced or transformed in the country are fundamentally cement or wood products and a few metallic ones.

Cement, limestone, tools and many equipments are produced by individual firms with no competition in the market.

The following table shows the distribution of construction materials industrial units, according to the number of their employees.

CONSTRUCTION MATERIALS INDUSTRIAL UNITS ACCORDING TO THE
NUMBER OF THEIR EMPLOYEES.

CODE	NUMBER OF EMPLOYEES	CATEGORY	NUMBER OF FACTORIES
I*	5 - 9	Small Industry	197
II*	10 -19	Small Industry	85
III*	20 -50	Medium Industry	54
IV*	51 or more	Medium or Large	44
V**	1 - 4	Shop	122

* National Office of Statistics, Directorio Nacional de Establecimientos Industriales 1976.

** Informe sobre la Situación de la Industria Productora de Materiales de Construcción después del Terremoto del 4 de Febrero de 1976. General Secretariat of the National Council of Economical Planning, May 1976.

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2.3.3 CONSTRUCTION MATERIALS PRICES.

The global increase of construction materials price indexes for 1980, based on 1950 was 424.4%.

Next table shows price index for 15 materials, in april 1980. It can be seen that wood (pine, cedar, lining) suffered increases of four - to six times in respect to 1950 prices. Increases in prices of adobe and bricks were also high, while variations in tile, corrugated tin sheets and barbed wire were moderate.

PRICE INDEXES FOR CONSTRUCTION MATERIALS ON APRIL 1980
BASED ON 1950 = 100.0

MATERIAL	UNITY	%
Cement	94 Pounds Sack	240.0
Brick	Thousand Units	422.4
Adobe	" " " "	340.9
Gravel	Cubic Meter	358.0
Sand (yellow)	" " " "	349.6
Roof Tile	Thousand Units	130.0
Pine	Board Foot	609.1
Cedar	" " " "	465.7
Wood Lining	Board Foot	612.9
Limestone	25 Pounds	479.8
Iron (Rods)	Piece	240.5
Corrugated Tin Sheet	SQ. Foot	145.4
Ø 3/4" Pipe	Foot	205.6
3" Nail	Pound	207.4
Barbed Wire	Roll	161.0

SOURCE : Bank of Guatemala

Indices de Precios de Materiales de Construcción, Abril 1980.

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2.4 HOUSING DEMAND.

According to their average monthly income, guatemalan families are divided into four basic groups.

The lowest income strata represents 35.9% of all families with an average monthly income under Q.100.00.

Low income strata include 46.8% of all families in the country and their average monthly income varies between Q.101.00 and Q.350.00.

Medium income strata represents 14.1% of all families and have an average monthly income between Q.351.00 and Q.900.00.

The upper income strata include 3.2% of all families, with an average monthly income over Q.901.00.

If it is considered that a typical low income family assigns for - housing purposes between 5% and 15 % of its total income, and medium and upper income families can assign between 15% and 30% to the same purpose, it can be assumed that almost half the population cannot afford for a complete housing unit at present costs, and some kind of specific strategy has to be designed to attend this population - housing needs.

In the following table, that shows housing demand for different - strata of the population in 1981, it is noticed that none of the - present housing possibilities in the country can be obtained by 35.9% of the population, while 46.8% can be considered for such solutions as site and services, basic unit, chore house etc.

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DISTRIBUTION OF HOUSING DEMAND ACCORDING TO FAMILY INCOME, 1983-1986

		UNIT COST	FAMILY MONTHLY INCOME	MONTHLY INSTALLMENT *	DEMAND. FAMILIES 1981	AVERAGE ANNUAL DEMAND			PERCENTAGE OF TOTAL POPULATION
TOP HOUSING	LUXURIOUS HOUSING	8,000 OR MORE	2001 OR MORE	FREE MARKET	1035	91			0.2 %
	UPPER HOUSING	80000-45000	2000-1201	FREE MARKET	5174	456			1.0 %
MEDIUM HOUSING	UPPER MIDDLE HOUSING	45000-18000	1200-901	FREE MARKET	10349	912			2.0 %
		11000-18000	601-900	113.54-185.71	18110	1595			
	LOWER MIDDLE HOUSING	11000-8000	600-401	113.54-82.57	30529	2689			14.1 %
BASIC HOUSING	BASIC HOUSING	8000-7000	400-351	82.57-72.25	24319	2142			
		7000-5000	350-301	72.25-51.61	19145	1686			
	SITE AND SERVICES/BASIC UNITS	5000-2000	300-151	51.61-20.64	143071	12601			46.8 %
		2000-1000	150-101	10.34	9944	7041			
SPECIAL STRATEGIES				UNDER 100		185759	16361		35.9 %

SOURCE: DEPARTMENT OF HOUSING
GENERAL SECRETARIAT OF THE NATIONAL COUNCIL
FOR ECONOMICAL PLANNING.

* MONTHLY INSTALLMENTS ARE CALCULATED ON A LEVELED BASIS, AT 11% ANNUAL INTEREST FOR A TERM OF 20 YEARS

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Housing demand for the next four years can be seen in the following table, prepared for the 1983 - 1986 National Development Plan, Housing Sector.

HOUSING DEMAND - PRODUCTION 1983 - 1986

YEAR	BASIC HOUSING	MIDDLE HOUSING	UPPER HOUSING	TOTAL
1983	24350	2925	1080	28355
1984	24823	2806	1187	28813
1985	24446	2251	1252	27949
1986	23716	2192	1264	27172

SOURCE : Department of Housing, General Secretariat of the National Council for Economical Planning - 1982.

This demand has been calculated, considering the projection of - national housing deficit minus an estimated production, based on - present trends.

2.5 LAND AVAILABILITY AND TENURE.

2.5.1 LAND AVAILABILITY.

Land in Guatemala has always been scarce for construction purposes.

There are four major reasons for that :

- a) Guatemala is basically an agricultural country, as it can be seen in paragraph 1.1.5.1, 58.2% of the labor force works in agriculture and all major exports are agricultural products. Concentration of land for agricultural purposes, is therefore an unquestionable fact.
- b) Booming population growth demands great amounts of land every year, and as long as main agricultural lands can not be divided, the rest

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of the available land has to be constantly parceled, resulting in a constant reduction of the per capita availability of usable land.

- c) Concentration of scarce land for speculative purposes. As long as usable land becomes more and more scarce, more and more land is monopolized for speculative purposes, resulting in a constant increase of land value.
- d) People traditional reluctance for living in high-rise apartment building, conveys cities to span over extended areas demanding even more land.

This scarcity of land and its consequent high price, is one of the most important facts that helps to bring about a reduced production of housing units in the country, and that contributes more significantly in the final cost of housing solutions. This contribution is quite more significant as the solution is more economical.

A situation like that is also contributing to push low income strata of the population into inappropriate land like ravines or flooding areas, and into peripheric areas far from their jobs and services. The following table shows the increase of land prices for BANVI - projects in metropolitan Guatemala City between 1976 - 1979.

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AVERAGE PRICE OF SQUARE METER OF LAND PURCHASED BY THE GOVERNMENT, IN DIFFERENT ZONES OF GUATEMALA CITY AND - ITS VARIATIONS IN FOUR YEARS.

ZONE	YEAR			
	1976	1977	1978	1979
6	0.76	12.50		12.88
7	4.13		10.00	
5		10.00		
18	2.25	2.50	0.93	
17*		2.40	5.01	6.50
21	1.03	0.46	7.16	
19*	3.11			
Mixco*	1.29	2.46	8.24	
Villa Nueva*	0.59	1.07	7.77	5.72
San Miguel Petapa*		6.80	3.58	
San Juan Sacatepéquez*		1.93	1.43	
Chinautla*			7.15	
Las Vacas*			2.86	
San Pedro Ayampuc*				1.89
Average Square Meter	1.88	4.46	5.41	6.74

All prices are in Quetzales, One Quetzal = One U.S. Dollar

SOURCE : El Problema de los Asentamientos Precarios en Guatemala, Hermes Marroquín Nov, 1979, based on data from BANVI and Marco Antonio To (Department of Housing, General Secretariat of the National Council for Economical Planning).

* Peripheral Zones.

The next table indicates average prices of sq. mt. of land in - different zones of Guatemala City between 1964 and 1978, showing - the drastic changes of these prices for certain areas, due to - speculation.

AVERAGE PRICES OF SQUARE METER OF LAND IN DIFFERENT ZONES OF
GUATEMALA CITY. PERIOD 1964 - 1978.

ZONE	PRICES	YEAR				
		64 - 68	71 - 72	1974	1976	1978
1	65.00	86.00	108.00	N.A.	180.00	
2	19.00	32.00	39.00	N.A.	75.00	
3	21.00	33.00	41.00	N.A.	42.00	
4	40.00	61.00	76.00	N.A.	217.00	
5	15.00	21.00	26.00	N.A.	83.00	
6	12.00	19.00	24.00	N.A.	42.00	
7	10.00	20.00	26.00	N.A.	75.00	
8	25.00	36.00	45.00	N.A.	58.00	
9	25.00	42.00	53.00	N.A.	217.00	
10	18.00	21.00	27.00	N.A.	130.00	
11	10.00	21.00	26.00	N.A.	75.00	
12	8.00	15.00	18.00	N.A.	58.00	
13	13.00	14.00	17.00	N.A.	127.00	
14	13.00	17.00	23.00	N.A.	85.00	
15	N.A.	12.00	29.00	N.A.	90.00	
16	N.A.	3.00	10.00	11.44	30.00	

All prices are in Quetzales, One Quetzal = One U.S. Dollar

SOURCE : El Problema de los Asentamientos Humanos Precarios en Guatemala, Hermes Marroquín Nov. 1979, based on information from Araujo y Anguiano, Professional Thesis 1979, Hermes Marroquín and Marco Antonio To.

Based on the table above, if we consider an hypothetical project for low income families in Zone 16, which showed the lowest average price per square meter, and if we assume that every family will receive a lot of 72 sq. mts. with a house of 36 sq. mts. we will find out that this family will have to pay $72 \times Q.30.00 = Q. 2,160.00$ for the lot -

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(without considering urbanization costs) and approximately Q.2,000.00 (at normal CRN costs) for the house. That means that land will represent 52% of total cost.

The following table shows total land purchased by BANVI in the last years and its cost per square meter. It is important to point out - that all land purchased by BANVI for regular projects, was bought - before 1976.

TOTAL AMOUNT OF LAND PURCHASED BY BANVI 1976 - 1979

ORIGIN OF FUNDS	PURCHASED AREA (SQ.MTS.)	TOTAL COSTS	AVERAGE PRICE PER SQUARE METER
Reconstruction Trust (FEER)	4,874,247.30	Q 8,469,812.17	Q. 1.73
Joint Venture BANVI/World Bank	4,142,354.50	Q11,501,090.46	Q. 2:77
Regular Projects	4,400,667.29	Q 2,506,110.31	Q. 0.56
T O T A L	13,417,269.09	Q22,477,012.94	Q. 1.67

One Quetzal = One U.S. Dollar

SOURCE : Land Records, Projects Unit, National Bank of Housing.

Average prices of land in different zones.

Price variation for rural areas is also important, however there is scarce information about this fact, and most of the projects carried out outside Guatemala City consist of credits for families that - already own their lot, a fact that is quite more common in rural - areas and provincial cities.

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LAND TENURE.

According to the 1979 Agricultural Census, there were 610,246 - properties in the whole Country. About 60% of all these properties were exploited by their owners, and represented about 78% of the - total surface.

The following table shows the relationship between the number of properties and their extension.

DISTRIBUTION OF PROPERTIES BY STRATA 1979.

	PROPERTIES		AREA	
	No.	%	HECTARES (in thousands)	%
I	250,918	41.1	60.9	1.4
II	296,656	48.6	616.2	14.7
III	49,137	8.1	774.7	18.4
IV	13,158	2.1	1793.0	42.7
V	477	0.1	955.5	22.7
TOTAL	610,246	100.0	4200.3	100.0

SOURCE : Censo Agropecuario 1979

STRATA : I Properties under 0.7 Hectares
 II Properties between 0.7 and 7 Hectares
 III Properties between 7 and 45 Hectares
 IV Properties between 45 and 900 Hectares
 V Properties over 900 Hectares

The following table shows the situation of properties in the Departamento of Guatemala.

PROPERTIES AND THEIR AREA IN THE DEPARTAMENTO OF GUATEMALA
1964.

	PROPERTIES	%	HAS.	%
TOTAL	15201	100.0	110,966	100.0
Owned	8955	58.9	102,516	92.4
Rented	3001	19.7	4,532	4.1
Communals	478	3.1	655	0.6
Usufructed	2556	16.8	2,874	2.6
Others	211	1.4	389	0.3

SOURCE : II Agricultural Census 1964.

The lack of legal possession of their land, however is one of the bigger problems faced by potential participants of housing projects in rural areas consisting of credits for site owners. Many households have inherited their properties from their elders with no document at all, many support their property with old titles, even colonial titles, and many have been living in that property for years, and consider it as their own.

In many cases, land belongs to local municipalities which has never worried of their properties, but are also against legally endowing them to the people who live on them.

2.6 INFRASTRUCTURE : HOW PROVIDED?

The provision of infrastructure in housing projects depends on many different institutions, including several ones for the same purpose. BANVI projects normally includes water and sewage networks, and roads. Electrical network is provided by INDE (National Institute for -- Electrical Development), schools depends on the Ministry of Education,

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markets on the municipalities and so on.

Private projects usually include water and sewage networks and roads, but assign specific areas for the Ministry of Education, the Confederation of Sports, etc. so they can complete infrastructure. It is common to see those areas completely abandoned after a few years after the project conclusion.

Up to date the National Committee of Reconstruction is coordinating actions among different governmental agencies in order to assure the adequate provision of infrastructure in public projects or NGO projects coordinated by the CRN

A typical coordination of the CRN would include the following steps :

- 1.- Design of units and urbanization by executive agency (BANVI, BANDE SA, NGO).
- 2.- Construction of urbanization (water, sewage networks, roads) and housing units by a private contractor under executive agency supervision.
- 3.- Selection of participants by CRN and executive agency.
- 4.- Construction of electrical network and public lighting system by INDE.
- 5.- Construction of schools by the Ministry of Education.
- 6.- Construction of sport fields by the National Confederation of Sports.
- 7.- Construction of parks by the local municipality.
- 8.- Allocation of units to participants by CRN and executive agency.
- 9.- Connexion of water and sewage networks to municipal networks by local municipalities.

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- 10.- Connexion of electrical network to national networks by INDE.
- 11.- Assignment of teachers to new schools by the Ministry of Education.
- 12.- Assignment of parks and roads to local municipality for further maintenance.
- 13.- Assignment of public lighting to INDE for future maintenance and service.
- 14.- Issuance of property to participants by CRN and the executive agency.

3. THE NATIONAL COMMITTEE OF RECONSTRUCTION (CRN).

The National Committee of Reconstruction (CRN) was founded one month after the earthquake of 1976 in order to coordinate all efforts aimed to rebuild the affected areas. This coordination includes governmental and non governmental actions, and/its main goal consists of orienting these actions into an efficient process.

After a certain time, it became obvious that fisical reconstruction was not enough, and reconstruction programs started to contain such aspects as people motivation, community organization, and self -- management of communal programs. At last they became integral development programs where different agencies, under the CRN coordination got along with the people in all sort of development projects from housing to agricultural improvement, from potable water networks to biogas - digestors.

Whole communities became involved in such programs. Original housing reconstruction projects gave way to potable water networks, latrines,

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low consuming lorena stoves, electricity, new agricultural techniques for traditional crops, and knowledge of new crops for higher incomes. - Community organization in local reconstruction committees offered the people new possibilities for managing their own businesses, cooperative groups appeared all over the affected areas, and people participation in all kind of projects, providing their labor and local materials, -- permitted the conclusion of many projects that otherwise would have - not been carried out.

However, this successful reconstruction process has been hardly - affected by later years struggle between the guerrillas and the army. People in rural communities became afraid of meetings, particularly if they were held during the night, community organization almost - disappeared. As a matter of fact, reconstruction activities had to be reduced to safe areas, and many projects were abandoned.

In spite of that situation, reconstruction projects in Guatemala - City and the eastern provinces remained normally, and after new - natural disasters in these areas like Santa Rosa's earthquakes of - 1979, Lake Peten Itza's floods of 1981 and Jalpatagua's earthquake early this year, new projects were begun under the CRN usual methods. On August 2 1982, a new reconstruction program was started to assist the western highland, and the CRN was called again to be in charge. This new program called PAAC (for Conflict Areas Action Plan) tends to help villages and hamlets destroyed by the war, to rebuild their houses and to start production again. After two months, temporary - shelter has been provided for about 5000 families in Estancia de la

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Virgen, Varituc, San José Poaquil, Nebaj, Nentón and other places and simultaneously, seeds and fertilizers are given to the families so they can start again the cultivation of their farms.

Some of the communities being helped by the PAAC have remained in - their same places, but others are completely new settlements.

These new communities are designed to become after a certain time, self-reliant villages, the projects include a village center with school, health post, church, and the houses; and a surrounding farm-land which will be cultivated under a cooperative system by the - community.

As long as the availability of funds is scarce, due to the economical crisis of the country, these new communities must be designed for a maximum use of local materials, appropriate technology and maximum participation of community members, who will provide most of the - labor in construction jobs. Temporary shelters are made of locally sawed wood and tin sheets for the roofs. All walls are completed by the families with such traditional methods as adobe (protected with barbed wire and diagonal braces), cane, wattle and daub, etc. These shelters and the whole village will be improved step by step, as long as new funds are available, and community economical conditions get better with new production, and better marketing methods.

3.1 CRN ORGANIZATION.

The CRN is a civil-military organization, that depends directly on - the President of the Republic.

The Committee in itself, is conformed by the President the Minister

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of Finances (Treasury), a Representative of the Federated Cooperative Groups in the country and an Executive Director who is appointed by - the President.

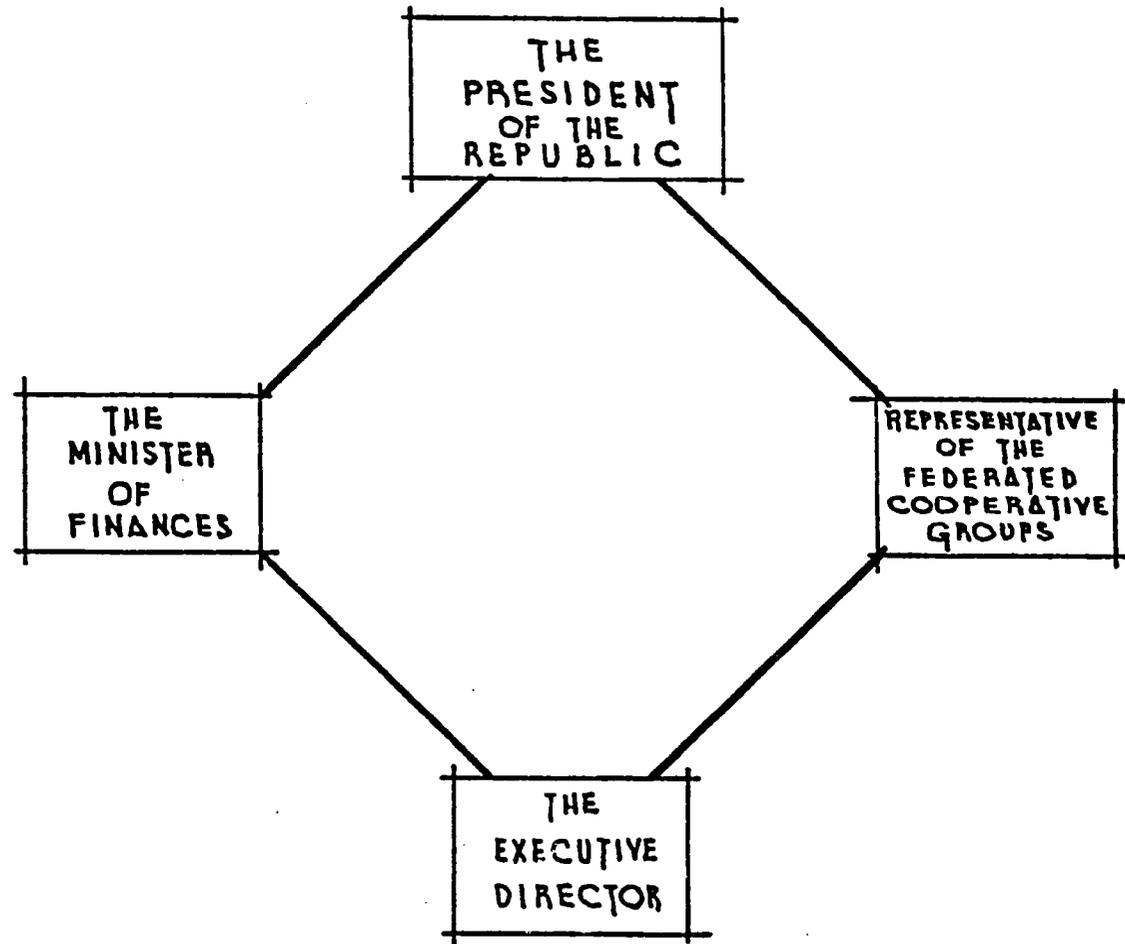
The Executive Director is helped by one Deputy Director and two - Secretaries, a military one and a civil one.

The Military Secretary is in charge of all the logistics like - transportation, supplies, materials, reparings, and is also in charge of certain specific construction programs, assigned to the CRN.

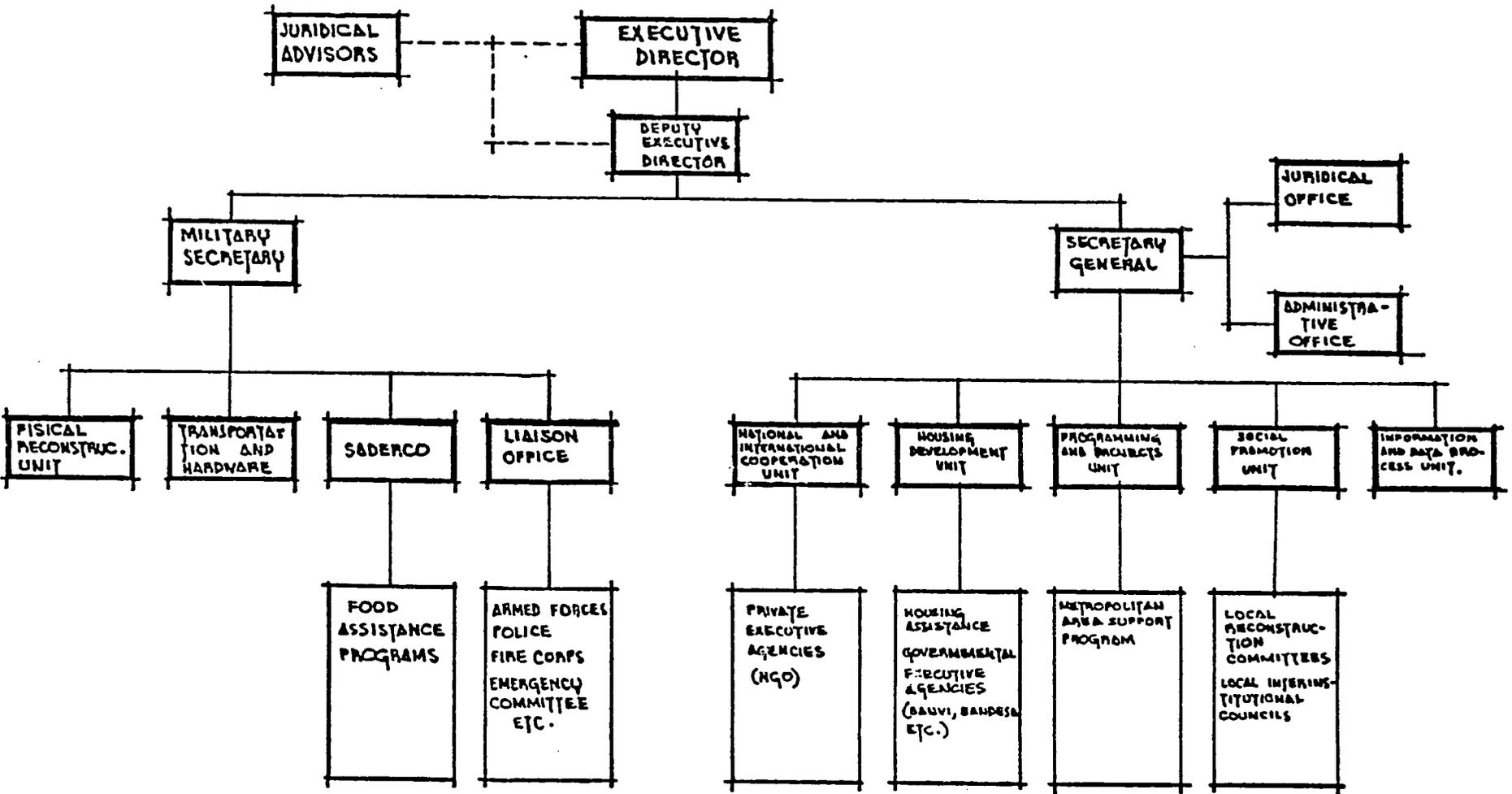
The Civil Secretary or Secretary General, is in charge of the - technical branch which elaborate plans and coordinates the action of the executive agencies.

Both secretaries are helped by specific unit coordinators who control the different operations.

THE NATIONAL COMMITTEE OF RECONSTRUCTION CRN



THE NATIONAL COMMITTEE OF RECONSTRUCTION, ORGANIZATION CHART



ABREVIATIONS

BANDESA: Banco Nacional de Desarrollo Agrícola, (National Bank for Agricultural Development).

BANVI: Banco Nacional de la Vivienda, (National Bank of Housing).

CEPAL (ECLA): Comisión Económica para la América Latina de la Organización de las Naciones Unidas, (United Nations Economical Commission for Latin America).

CRN: Comité de Reconstrucción Nacional, (National Committee of Reconstruction).

NGO: Non governmental institutions, (private voluntary organizations).

SGCNPE: Secretaría General del Consejo Nacional de Planificación Económica, (General Secretariat of the National Council for Economical Planning).

BIBLIOGRAPHY:

- 1.-CENSO NACIONAL DE POBLACION 1973; Dirección Nacional de Estadística.
- 2.-DIRECTORIO NACIONAL DE ESTABLECIMIENTOS INDUSTRIALES; Dirección Nacional de Estadística, 1976.
- 3.-EL PROBLEMA DE LOS ASENTAMIENTOS HUMANOS PRECARIOS EN GUATEMALA; 2o. Seminario Interregional Africa, América Latina sobre Asentamientos Humanos Precarios; Hermes Marroquín, 1979.
- 4.-EL PROBLEMA DE LA VIVIENDA POPULAR EN GUATEMALA. CIVDU, CIID, SIAP, IDESAC, 1978.
- 5.-EL RECURSO TIERRA Y SU INCIDENCIA EN EL DESARROLLO URBANO Y HABITACIONAL. Ponencia de Guatemala ante la VIII COPVIDU.
- 6.-ESTUDIO DE ORDENAMIENTO METROPOLITANO DE LA CIUDAD DE GUATEMALA. Municipalidad de Guatemala.
- 7.-ESTUDIO DE LA VIVIENDA RURAL EN GUATEMALA. Eduardo Aguilar A.
- 8.-GUATEMALAN EARTHQUAKE STUDY (Substantive Report No. 2), Frederick L. Bates (University of Georgia), W. Timothy Farrell (Instituto de Nutrición de Centroamérica y Panamá), and Jo Ann Glittemberg (University of Colorado).
- 9.-INFORME SOBRE LA SITUACION DE LA INDUSTRIA PRODUCTORA DE MATERIALES DE CONSTRUCCION DESPUES DEL TERREMOTO DEL 4 DE FEBRERO DE 1976. SGCNPE.
- 10.-LA DISTRIBUCION DEL INGRESO EN GUATEMALA, Evelyn Klüssmann 1973.
- 11.-LA PROBLEMÁTICA DE LA CIENCIA Y LA TECNOLOGIA EN EL SECTOR VIVIENDA EN GUATEMALA, Julián I. Martínez, 1980.
- 12.-LA VIVIENDA POPULAR EN GUATEMALA, ANTES Y DESPUES DEL TERREMOTO DE 1976. Hermes Marroquín y José Luis Gándara. 1982.
- 13.-PROPUESTA DE POLITICA NACIONAL DE VIVIENDA, SGCNPE, BANVI, BANDESA, PNUD GUA/76/106.
- 14.-SEMINARIO SOBRE POBREZA Y GRADO DE SATISFACCION DE LAS NECESIDADES BASICAS EN EL ISTMO CENTROAMERICANO. CEPAL (ECLA) 1981

URBANIZACION Y DESARROLLO, ANALISIS DEL SISTEMA DE CENTROS PO-
BLADOS DE GUATEMALA. Actualización del Estudio Realizado entre
1978 y 1979, por Lelia Oquendo, Enrique Neuhauser, Jan Platin-
ga. SGCNPE/ PNUD GUA/76/011.

**LAND TENURE CHOICES IN URBAN UPGRADING PROJECTS
WITHIN THE CONTEXT OF NATIONAL LAND POLICY**

**Edited by Alfred P. Van Huyck from various writings
of Professor William Doebele, Harvard University**

September 1982

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LAND TENURE CHOICES IN URBAN UPGRADING PROJECTS WITHIN THE CONTECT OF NATIONAL LAND POLICY

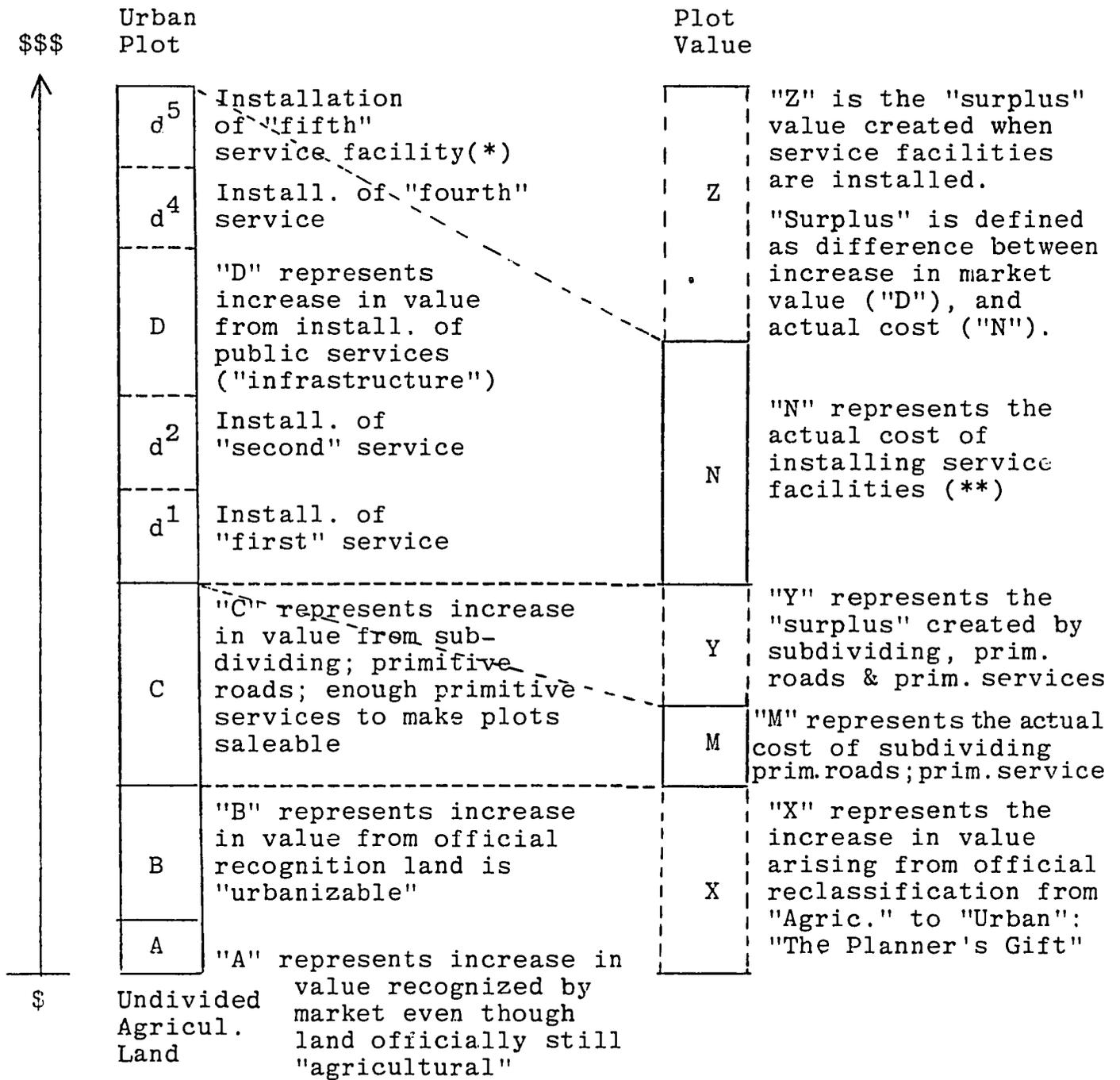
This paper discusses the theory of how land increases in value, the general characteristics and importance of land policy, and the major urban land policy instruments whereby the public sector can intervene in the land market to implement land policy. Finally, it reviews the issues of land tenure, as a key aspect of land policy, with reference to settlement upgrading programs.

I. THE PROCESS BY WHICH VALUE IS CREATED IN URBAN LAND

- A. Urbanization is a Wealth-Creating Process. In simplified terms, the mechanism is as follows: National population increase and migration results in larger urban populations which require land for settlement, social facilities, jobs, and commerce. The amount of land available in cities (particularly land with urban services) is limited. Thus, an enormous demand pushes upon a very limited supply, forcing dramatic increases in prices.
- B. Increasing the supply of urban land by extending transportation lines, and servicing new areas with water, sewage, electricity, etc. is costly and slow. In almost all countries, governments have not been able to increase the supply of urban land at a rate equivalent to the demand created by migration and natural increase. Thus, supply has always lagged behind, the price has continued to increase much more rapidly than the costs of most other goods.
- C. This process is presented in more detail, in Diagram I on the next page.
- D. Conclusions Drawn From the Diagram
 1. In a perfect market system, supply will respond immediately and fully to new demand, and increases in the values of goods will be the costs of producing those goods, plus a reasonable profit for the entrepreneurial work of the developer.
 2. Urban land markets are very imperfect: Demand is very high and continuous (see discussion above), and subdivision (C) and (M) falls far behind demand, due to the scale of the problem; speculative withholding of land in the expectation of even higher prices in the future; and inadequacy of public authorities to grant permits at the necessary rate. In some cases, clouded titles and outmoded recording systems also constrict supply.
 3. The demand-supply discrepancy between demand and land subdivided into lots is great. But the discrepancy between the demand for serviced urban lots, which require the actions of many public agencies as well as the developer, is even greater. Virtually no major city in any developing country has been able to supply serviced lots at the rate needed by urban population increases. Thus, while the cost of installing services (especially sewer sytems) is high, (N) on diagram , the

DIAGRAM I

SCHEMATIC DIAGRAM OF THE INCREASE IN THE VALUE OF LAND (PER SQUARE METER) AS IT PROCEEDS FROM LARGE, UNDIVIDED, UNSERVICED PARCELS OF AGRICULTURAL LAND (base line) TO SMALL, SUBDIVIDED, SERVICED PLOTS READY FOR URBAN CONSTRUCTION (top line). (Actual proportions of all items will vary greatly in different countries, different cities, and different projects.)



(*) In this diagram, we assume five services. An actual project may have many more (or less).

(**) Like "D", "N" and "Z" may occur in steps, with each service. (Each step not shown, as in the case of the "five" steps represented in "D".)

resulting increase in market value is almost always much higher, causing surplus (Z).

Also note that if (N), the cost of installing public services is borne by public agencies, with no mechanisms for recovering these expenses from the land that is benefitted by them, surplus (Z) (or profit to the owner or developer) is correspondingly greater.

4. Surplus (X) is the increase in land which occurs, when urban growth causes people to perceive the possibilities of future urbanization, and hence are willing to pay more for the land; and when this fact is legitimized by an action of the appropriate public land control agency, designating, on a zoning map, or official master plan, that this particular area is now legally eligible for urban uses.

It should be noted that both these factors occur without any cost or investment by the owner, even though the financial benefits may be quite substantial.

This increase is known as "the planner's gift," because it confers a surplus or profit to the owner (or developer) without any outlay on his part.

E. Policy Implications

Because the process of urbanization produces wealth (often great wealth), a number of policy issues arise, the most important of which is:

1. Who gets the "surpluses" or "profits from this process?" In many countries it is the person who is the owner or developer of the land at each stage. Frequently, ministries of public works, municipalities, etc. see new urban migration as a cause for alarm, because it will impose heavy new burdens on public agencies to provide services for the new citizens of the city. Every effort is therefore made to discourage urban migration.
2. On the other hand, urban migration undoubtedly produces wealth in the form of increased land values. More important, as argued above, it generally produces more increases in value than the costs it creates.

The real issue, therefore, is: How are these increases in land values to be allocated, as between private owners/developers and public bodies?

It would appear that most cases, public agencies could recover their full costs (if they had the proper institutions for doing so), while still leaving a reasonable profit to the owner/developer. Or, from a different point-of-view, it could be argued that since the increase in urban populations is a social phenomenon, all or virtually all of the "surpluses" mentioned should be recovered by public bodies, leaving only minimal profits to the owner/developer.

II. IMPORTANCE OF NATIONAL URBAN LAND POLICY

The preparation on adoption of a National Urban Land Policy is a means whereby the government can guide its intervention in the land markets.

A. Relation of Economic Development

Cities are the heart of industrial growth in all countries. Urban growth, in turn, is dependent on the availability of land at the right places at the right terms. Urban development without sound land policy creates problems of congestion, resulting in heavy losses in national wealth in the form of wasted human time and productivity, fuels and other natural resources.

B. Required Participation of Public Sector

Many other economic sectors can be handled by the private sector; with minimal public intervention. Urban land, however, always must be tied to major public infrastructures--water, sewer, roads, electricity, etc., No government can avoid being involved in urban land service activities at the city scale.

C. Economic Importance

1. In almost all counties, the price of urban land has been rising rapidly. The burden on the poor is especially great, but high urban land costs, adds to production costs in general which cause higher prices for goods and services for everyone.
2. Urban land tenure policy (a part of urban land policy) can have a major effect on national rates of savings and investment. Specifically, when poor families are given secure tenure, they have an incentive to mobilize capital ("brick-by-brick" capitalization) which would never be put into savings accounts, or otherwise enter the process of economic development. Self-help housing mobilizes savings and creates new capital in a way no other institution does.

III. THE OBJECTIVES OF NATIONAL URBAN LAND POLICY

A. Efficiency

1. Insuring the maximum productivity all parcels for economic benefit and minimum "diseconomics."
2. Responsiveness of rapid increases in demand: particularly the ability of the policy to accommodate a high flow of low-income migrants, if required.

B. Equity

Provision of access to all groups (particularly those of low-income) to land for residence, commerce, industry and institutions in a way that is socially just and responsive to the differences in income and power of those affected.

C. Compatibility

Compatibility with national economic planning, national urban policy, the national system of federal, provincial and local governments, the institutions of taxation and public finance, etc.

D. Continuity

To the extent possible, the policy should avoid abrupt "breaks" with the cultural and political systems which are dominant or emerging in the country.

IV. **ALTERNATIVE INSTRUMENTS FOR USE IN A NATIONAL URBAN LAND POLICY**

There is a wide selection of instruments by which the public sector can effect the land market.

A. Complete State Ownership

All land may be nationalized and owned by the State. In this case, all of the processes of land development would be carried out by the State, and all the "surpluses" described above be returned to its treasury. Perhaps the clearest example is the Soviet Union.

B. Large-Scale State Acquisition and Land Banking

This system provides national technical and financing support for cities to acquire all land needed for urban development for say 10 years in advance. As land is disposed of each year, additional land is acquired, so that the 10-year "backlog" is maintained.

C. Strategic Acquisition in Advance of Need

In this system, the ministry, city or a public development corporation will acquire land on a large scale. Parcels will be selected on the basis of their special impact on future metropolitan form: the sites of "New Towns" (or "new Towns-in-Town" major highway interchanges; major housing projects; regional parks; areas for water collection and storage; flood control areas; large industrial parks; etc.

D. Installation of Public Services (Infrastructure as Incentives)

Governments follow two philosophies of installing public services; follow the need, or use service installation as a tool to guide growth in desired directions. The latter is obviously an indirect way to carry out land policy, compared to ordinary land use controls such as zoning, but it can be effective.

E. Land Readjustment

"Land Readjustment" is a system practiced in Japan, South Korea, Taiwan, and Australia, which permits public bodies to designate areas for new urban development; to subdivide and install services on the land; and then to return a remainder to the original owners. The cost of installing public services is met by the public body retaining some of the serviced lots and selling them when development is completed. On the other hand, the remainder returned to the owners almost always has a value much higher than the total value of their land before the project. Though this system new urban development can be "self-financing," that is, done without cost to the public, since all public investment is recovered by the sale of a certain percentage of the project's lots by the body doing the development. On the other hand, owners need not suffer, since the land returned to them, while smaller in areas, will be much higher in value.

F. Land Price Regulation

Some countries give the government direct power to intervene through land value "freezes" and other statutory means if land prices appear to be unusually high. As a result of this, and other land use control measures, land speculation (dealing in land purely to make a quick profit) become very much less attractive. It should be noted, however, that such techniques require great political will and administrative enforcement.

G. Land Use Regulations

Use of zoning, subdivision, building codes, and other means to regulate the use and dimensions of buildings and land, but many developing countries lack the administrative capacity to enforce their regulations, particularly in rapidly growing urban areas.

H. Taxes on Land and Improvements

The use of taxes, proportioned according to value, on all land and improvements (basically buildings) is typically available. While these taxes are the foundation of municipal financing in the United Kingdom and United States, their application in developing countries is minimal. Even in countries where the system exists, the rates are often so low that the tax is insignificant.

I. "Betterment" Charges

This is a special tax, imposed on surrounding properties when a public service has increased their value. It can be used for streets (or street widenings); installing water lines; sewer systems; public parking; or even historic preservation projects. The theory is that if public money has been spent in a way that "(D)" values are created (see previous diagram), the public agency should have a right to recover this "betterment" given to landowners at public expense. In practice, however, existing betterment recovery programs do not attempt to recover all of "(N)" and "(Z)", but only "(N)," that is, enough to permit the public agency to recover its own costs in building the project, but not all the new value created. In other words, the attempt is to recover "(N)" but leave "(Z)" to the fortunate land owners affected by the project.

While the mechanics of determining the "area of influence" of a project, and proportioning costs among the land parcels in that area, are difficult, the administration of system has been worked out in Colombia and is transferable to other countries.

J. Deferred "Betterment" Charges

It has been suggested that the "Betterment Charges" system could be greatly improved by providing that charges need not be paid immediately, but simply recorded against the property. The amount due would be increased each year according to an interest rate that would guarantee the public body constructing the public work a complete return of capital even if payment were delayed for many years. However, payment would always be required upon the sale of the property. Thus, owners would not have to incur charges until the increased value was created by the public work was in a "liquid" state (that is, when this value was reflected in the higher selling price). It is, of course, at this moment that the seller has readily available assets to pay.

While this system might have some problems, such as concealed sales, it has many interesting advantages. It would presumably reduce political objection to the basic betterment collection idea, since payments would be more "painless." Equally important, it would facilitate the use of the betterment recovery system possible in lower-income areas.

V. LAND TENURE ISSUES

A. Introduction

Land Tenure is a basic part of overall national land policy as it is an important influence on the process of allocation of urban land urban investment decisions, and land use.

For all households, the form of land tenure (rights to own and/or use property as legally defined) is of critical importance to their social and

economic wellbeing. Amongst low income people, it is felt that "secure" land tenure is the difference between perpetual dependence and "marginality" and some degree of economic dependence.

In squatter areas in particular, the amount of investment in housing is closely correlated with the perception of risk of removal, irrespective of the technicalities of legal title.

Stated operationally, the critical element may not so much be the precise legal category involved as the perception of the occupant of his security in relation to the investment contemplated. Thus, in Africa, a renewable license to occupy may give enough feeling of security to persuade its holder to make substantial investment in residential construction on the site.

Because it does involve mental attitudes, the calibration of appropriate tenure terms for projects is not an easy one.

B. Tenure in Relation to Market and Land Use Controls

What happens to a given piece of urban land is a product of three basic forces: market, land-use controls and form of tenure. One way of defining land policy is that it is the function of finding the optimum balance of these three elements in a specific situation.

Market can be highly flexible but subject to important limitations: (i) once committed, buildings are often not easily convertible to new market pressures, (ii) information is imperfect, (iii) owners must depend on credit sources as well as their own decision to respond, and (iv) individual decisions are subject to unpredictable externalities, such as public decisions with respect to transportation and infrastructure, the actions of adjoining landowners, etc.

Land Use Controls tend often to be negative, pose serious enforcement problems (particularly in developing countries), and are hard to individualize to specific sites. Some forms of indirect land use controls, such as those involving credit or taxation policy, may be more positive in effect, but still lack the specificity possible through the mechanism of tenure.

Tenure controls, exercised through deed restrictions or lease provisions, are: (i) generally more powerful than land use controls since they are based on certain property (or "ownership") rights being held by the public body, so that violations may result in the property itself being transferred back to the public, whereas violations of land use controls normally only result in fines or other less drastic remedies; (ii) can be individualized, since the ownership retained can be varied in each case, while land use controls normally apply to general districts; and (iii) permit a wider range of responses to such policy matters as efficiency, equity and recapture of increments, since constitutional limitations on land use controls are frequently not applicable where the public has legitimately acquired a share

of the ownership itself. Their disadvantages are: (i) to the degree that controls are individualized to each parcel, administrative complexity is greatly increased; (ii) temptations to graft and manipulation are greater, since the negotiations are individualized and hence less subject to public scrutiny than land use districts, which affect many landowners at the same time; and (iii) can be potentially more stifling to private initiative than land use control systems which do not interfere with basic ownership rights.

C. Dynamic Aspects of Land Use

Another pronounced characteristic of urban land in the large cities of developing nations is the dynamism of the forces (government and market) which act upon it: Squatters upgrade. Low-density residential districts formerly on the outskirts find themselves centrally located, and subject to pressures to accommodate more people. For example, sites and services projects may have to begin with quite large lot sizes, say, 300 sq. meters. Some years later, as the urban area has spread, there may be heavy pressures to resubdivide into lots of, say, 150 sq. m. each. Ideally, initial tenure arrangements and building codes would take this potential into consideration, so that reassignment would be easy at the designated future date. Under these conditions, flexibility and adaptability become factors of high importance.

The establishment of institutions for defining the rights of ownership and use of land ("tenure") in a given country are therefore a major concern.

In settlement upgrading programs, decisions about the kind of land tenure to be made available and the administrative systems for providing it are the utmost importance to the eventual success of the projects.

D. An Overview of the Special Problems of Land and Its Tenure

- I. Land Tenure is closely associated with the historical (including Colonial) precedents and the social/cultural context of the country. Therefore, there are an enormous array of land tenure forms varying from country to country.

In African countries, the persistence of tribal traditions often restricts alienability, or establishes different market prices for tribal versus non-tribal purchasers. In many British colonies a dual tenure system was established, in which "Crown lands" (generally the areas of colonial settlement, mines, ports, etc.) were governed by English law, while the "territorial reserves," that is, the remainder of the country (often 80-90%), continued to be governed by ancient tribal custom, which was frequently not only unwritten and ill-defined, but varied greatly from one tribal area to another. This MOSAIC of ownership concepts still exists, even in major urban areas. In Francophone Africa, tribal concepts have been modified by the Napoleonic Code, particularly, Article 554, which states that ownership is "the right to absolutely free enjoyment and disposal of objects, provided that they are not in any way contrary to the laws or regulations. This is generally considered to

to give greater powers of control over land than English law, although the Article is obviously ambiguous and has received different interpretations in different countries. In the Middle East, and parts of Africa influenced by Islam, land ownership is defined by concepts codified in the Ottoman Land Law of 1858; which divides land ownership into four categories: mulk (private); miri (State); musha (tribal/collective); and waqf (charitable and religious). The latter category is a particularly significant one. Coming from the phrase mawquf lilah ("stopped" for God), waqf land is part of the endowment of such uses as mosques, hospitals, libraries, schools, and, on occasion, housing for indigent families. Although some countries (Iraq, Jordan, Lebanon and Syria) have ministries or departments for the review and administration of such lands, the State does not have the power to change their use. This can become a critical problem in urban areas, particularly if it is necessary to engage in urban redevelopment, or major public projects such as highways.

2. The Law of Expropriation

Many developing countries suffer from badly outdated expropriation legislation which either (i) makes expropriation virtually impossible or (ii) so costly and time-consuming that it is, for many purposes, almost useless. Even when most public acquisitions are in fact negotiated, an effective expropriation law is necessary as a "back-up" possibility to prevent owners from demanding excessive prices.

Central to effective expropriation procedures is a provision for "quick taking," that is, for giving the government access to the real estate concerned at once, while negotiations, and possibly litigation, continue as to its fair price. The questions in many developing countries is persuading governments of the importance of this item in the planning of legislative reforms, and securing the necessary political support.

3. Cadastral Surveys

Many developing countries lack adequate basic surveys of property boundaries. The absence of a reasonably accurate cadastral system makes all forms of urban land use control extremely difficult. Moreover, any effective system of land taxation and tenure policy is dependent on its existence.

Recent developments in aerial photogrammetry and computer storage of both numerical and graphic data have enormously facilitated and enlarged the techniques available for dealing with this issue. The reluctance of governments to commit resources and trained personnel is still a problem.

4. Deficiencies in Recording Systems and Unclear Titles

The government's capability to record the ownership of parcels quickly and accurately is important for clarifying land tenure rights.

The importance of an effective recording system is illustrated by the number of public entities which can utilize the information as shown in Table I below.

TABLE 1: PLOT REGISTRATION USES BY VARIOUS AGENCIES

	Municipality/Local Government	Metro Government	Provincial/Regional/State Administration	Central Government	Parastatals/Utilities	Private Companies & Individuals	Political Parties	Household
General Urban Administration	0	0	-	X	-	-	-	-
Delivery of Social Service	0	0	0	0	-	-	-	X
Health Services Delivery	0	0	0	0	-	-	-	-
Censuses	-	-	-	0	-	-	-	-
Cost Recovery	0	0	X	X	0	-	-	-
Property Taxation	X	X	-	-	-	X	-	-
Forward Planning	0	0	X	X	0	-	-	-
Land Acquisition	X	X	X	X	X	-	-	-
Land Use Analysis	X	X	X	-	-	-	-	-
Household Surveys for Socioeconomic & Transportation Planning	X	X	-	X	-	-	-	-
Granting Property Titles	0	0	-	0	-	-	-	-
Monitoring, Evaluation & Impact Analyses	X	X	-	-	-	-	-	-
Marketing	-	-	-	-	X	0	-	-
Political Organization	-	-	-	-	-	-	0	-
Giving the House a Specific Address & Identity	-	-	-	-	-	-	-	0
Property Transactions	X	X	X	0	-	-	-	0

Note: 0 = major use; X = minor use.

Source: House Registration Handbook (page 4) Soad Yahya, Urban Development Department World Bank, 1982.

In many developing countries the recording systems, particularly in rapidly growing urban areas, are inadequate to modern demands. In some parts of the world, such as Africa, this condition has resulted from the traditional concept that land "belonged" to whomever wished to work it, or according to the informal decisions of the village council or chief. In others, such as Latin America, recording systems existed, but have been unable to keep up to the pace of contemporary urban change. In still others, the culture or religion has established many forms of claims "by custom" which have never been put down in written form.

While these may seem to be relatively unimportant problems, they can be quite critical to effective urban politics. For example, in Djakarta, the Perumnas Sites and Services projects were seriously delayed and are still impeded by the deficiencies of the Indonesian land recording system.

Neither tenure policy nor effective property taxation can be carried out in the absence of accurate recording of ownership.

The question of clouded titles has been greatly aggravated by the existence of large-scale squatting, and the question of the acquisition of rights by "adverse possession." As time passes, not only do the original squatters gain additional legitimacy by operation of law in many countries, but they themselves engage in numerous informal sales, leases, and occupancy agreements which become increasingly difficult to unscramble. Procedures for the rapid and equitable clearing of "clouded titles" is thus a pre-condition to projects involving substantial amounts of urban land.

One method is the use of "title insurance," which would assign title to the most probable owners, but provide insurance should any other claimants later appear.

VI. POLICY OBJECTIVES AND TYPES OF LAND TENURE

A. Policy Objectives

The selection of appropriate land tenure systems should reflect the policy criteria by which a given system might be judged. The main categories of land tenure have differing advantages and disadvantages with regard to the policy objectives being sought. The policy objectives to be considered are:

- (1) Efficiency: Does the system encourage a smoothly functioning land market that:
 - (a) Permits the maximum productivity of land as a resource for all uses at all places at all times;

- (b) Has it flexibility to be responsive to rapid increases in demand, which normally under modern conditions implies the ability to assemble land as needed for such demand; and
 - (c) Has it flexibility to be responsive to major changes in urban form, whether resulting from market forces, or the intervention of government.
- (2) Equity: Does the tenure system provide reasonable access to all groups (particularly those of low income) for land for housing, business and other needs? Does the tenure system allow recapture by the public sector increments in land value increase when it is socially desirable to do so.
 - (3) Compatibility: Does the tenure system integrate well with other policy instruments dealing with economic development and urban land, such as national; provincial and municipal planning, taxation, the management of public service systems, etc.?
 - (4) Continuity: Does the tenure system avoid, to the extent possible, abrupt "breaks" with the cultural and political system which lead to existing arrangements?

B. The Major Types of Land Tenure

Operationally, it is probably most helpful to use the concept, that property in land consists of "a bundle of rights," which can be distributed to an almost infinite number of ways to different parties (including, of course, public bodies). No one form of tenure can be selected for general application in upgrading projects. Choice of tenure systems will be governed by many public and private concerns according to country and location.

I. Communal Ownership (Tribal)

Probably the oldest form of land tenure is tribal, in which the territory controlled by the tribe is not considered to be the personal property of any person or family, but of the group as a whole, with the chief or tribal council allocating specific sites for housing and agriculture to individuals, and resolving any disputes which may arise.

In many African cities, however, a pressing problem is that tribal traditions have carried over into urban areas, particularly when members of one tribe have concentrated in a single section. In such cases, there are often strong pressures to allocate land only to other members of the tribe, at lower than market prices, and possibly subject to other tribally-imposed controls. While tribal authority tends to erode, sometimes fairly rapidly, under urban conditions, these organizations often have to be considered in the formulation of effective policy, particularly for low-income groups.

2. De Factor Tenure

This form of "tenure" is usually illegal. In this case, public or private land is generally occupied by squatters without the owner's permission. This type of tenure can represent a large proportion of urban residential area (and population concerned) in major urban centers of the developing world. The degree of security in these areas varies greatly. Often unofficial recognition takes the form of public services provision and public inaction or tolerance over a period of several years.

3. Temporary Tenure

In some cases, it may be desirable to grant temporary tenure to residents of upgrading areas. This is done when the future land use of the area is yet in question, or to postpone decisions regarding the future of the settlements in question. Temporary tenure may be very short or renewable. Types of this form of tenure include:

(a) Right of Occupancy

A form of tenure based on legal statutes rather than title. It is generally granted by government for a temporary period and can be revoked should the land be needed for other purposes. Occupancy rights are granted under obligation of rent and other possible conditions.

(b) License and Permits

A system granting temporary legal tenure under statute. These are granted generally on a short-term basis (i.e. five years) with a small annual fee. They may be either revoked or renewed.

4. Semi Permanent Forms of Tenure

There are several forms of more semi permanent legal tenure which could be instituted in upgrading projects. In these cases, choice of tenure ranges between public and private "rights" and responsibilities. Generally, tenures which provide the greatest public control also require highly developed and efficient administrative mechanisms in order to be effective. On the other hand, tenure which emphasizes private rights require less public administration but provides for less public control.

(a) Private Leasehold Tenure

This tenure system occurs when a private owner leases or grants temporary title to a private individual or entity for a specified period and an annual fee. The lessee may have full rights or certain restrictions may be applied. Public control or restrictions may be similar to those on freehold tenure.

(b) Public Leasehold

A form of tenure which occurs when a public body leases land to a private individual or entity. In this case, title is granted for a specified period and for an annual fee. Special conditions may also be applied in addition to other urban development controls.

5. Permanent Forms of Tenure

Permanent forms of tenure which transfer legal ownership for an indefinite period with termination only possible at time of sale.

(a) Private Freehold

A form of tenure in which land is owned by a private individual or entity with permanent and nearly exclusive rights. Public controls over this tenure form generally may include restrictions on zoning, subdivision, building, etc. This type of tenure is often desired by financial institutions as a basis for mortgage lending. It provides the owner with a capital asset.

(b) Public Freehold

This form of tenure constitutes public ownership of land. In upgrading projects, public freehold tenure will probably be restricted to open areas, rights of ways, and community facilities. Of particular public and private concern, is the fact that a balance needs to be achieved between the needs of areas for public freehold land exist within a project area, costs which are usually attributed on an area basis, may be excessive. Furthermore, in upgrading areas the introduction of public land usually results in the displacement of households leading to compensation and alternative replacement housing solutions.

5. Combination of Tenure Systems

Certain systems combine different forms of tenure.

(a) Lease Purchase

A tenure form which combines leasehold and freehold systems. A lessee enters into an agreement with either a private or public entity with an option to purchase after a specified period. During the period of lease, the lessee is under obligation of rent and possibly other restrictions.

(b) Distinction Between Land and Improvements

One important distinction is that between land and improvements (that is, all types of structures, or other changes which increase

the original value of the land). In cases of squatting, for example, it is all-important to squatters if, upon removal from the land, they will or will not be compensated for the improvements which have been made. If, as in Venezuela, the law is relatively generous with respect to this question, there will be incentives to construction in squatter areas. If the law is strict, squatter areas are likely to be dominated by the minimal shelter investment possible. Similarly, in sites and services projects, it may be possible for the public body to retain significant rights in the land and infrastructure, if it is firmly established that full market compensation will be paid for all improvements if it becomes necessary to move any of the participating families.

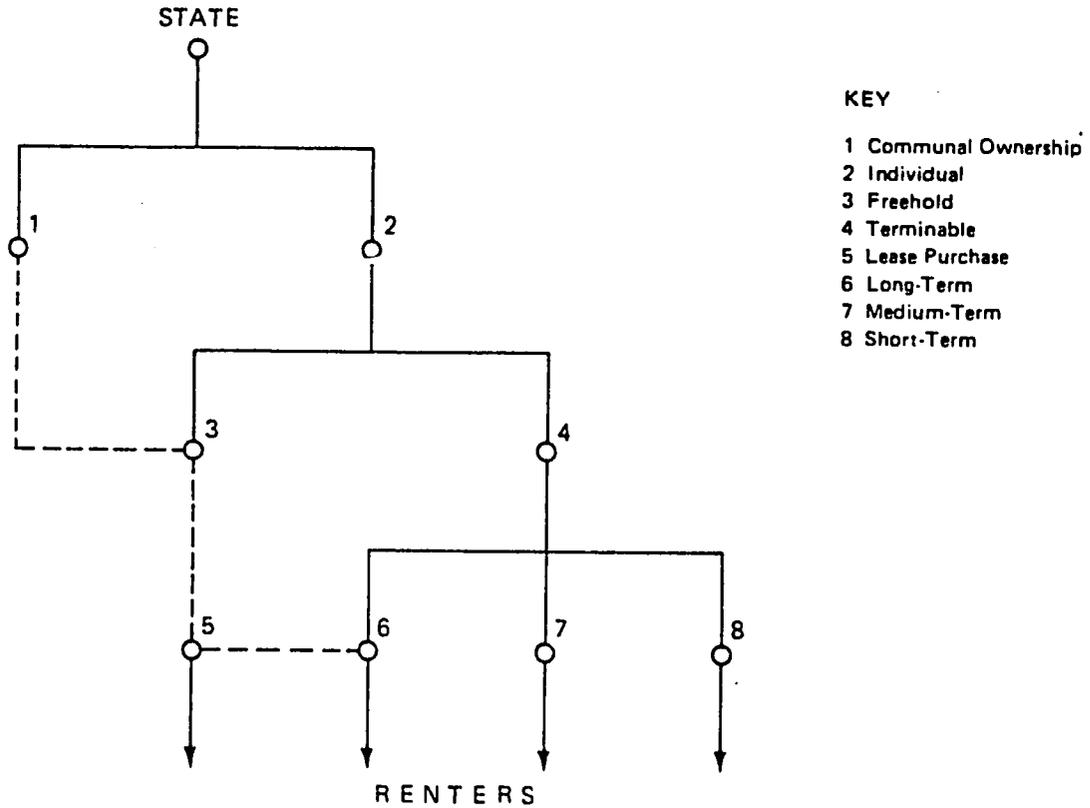
(c) Division of Tenure Between "Development Rights" and "Use Rights"

"Use rights" have to do with the right to benefit from and to sell land or structures according to the use of which they are currently being put. "Development rights" have to do with the right to benefit from more intensive use of land or structures, by conversion to a more profitable use, increasing density, etc. Because "use" values are present, they can be readily capitalized into a specific value. Because "development" values necessarily deal with the future, their capital value depends on the rate of discount applied, which in turn is dependent on a number of calculations, including, in most cases, the stability and probable future policies of public land use control, likelihood of new taxation, expropriation, etc.

Because of the fact that the value of development rights (particularly in urban areas) depends upon such things as governmental installation of infrastructure and transportation, and on population growth in that city, as well as the actions of adjacent landowners, it is frequently argued that much of development value is socially created and therefore more legitimately subject to public control than interferences with the value of use rights. A variation of this theme is that there can and should be public ownership of development rights while use rights remain private.

Figure 2 presents the network whereby the different types of tenure can flow from the State to individual households

FIGURE 2: ALTERNATIVE POSSIBILITIES FOR DISPOSITION OF LAND RIGHTS FROM STATE TO INDIVIDUAL



Source: House Registration Handbook (page 29), Soad Yahya, Urban Development Department, World Bank, 1982

C. Observations Regarding Tenure Types and Objectives

In many developing countries, existing systems of tenure are deficient in one or more of the following respects: (i) they do not result in the most efficient patterns of land use; (ii) they reinforce existing inequalities of wealth and opportunity; and (iii) they are "mechanically" ill-adapted to the needs of rapid urbanization because of cumbersome methods of registration and recording, clouded titles, transfer taxes, lack of adequate powers of expropriation for legitimate public needs, and other out-moded institutions left over from earlier periods, which generally are particularly burdensome to those with low incomes.

However, since land does have a dual private and public nature, some forms of radical change in the tenure system can result in fundamental tradeoffs, the effects of which must be carefully considered.

Many types of public interventions, for example, promise theoretical advantages in both efficiency and equity, but in practice may require very large and relatively high-level administrative skills which are beyond the current capability of many governments, particularly at the municipal level.

Thus, while deficiencies and inequities of existing tenure arrangements are easy to observe, corrective public interventions may also initiate negative effects in high start-up costs in money, administrative time, and litigation (since expropriation procedures are lengthy, and serious constitutional questions may be involved).

Diagram I attempts to relate the types of land tenure to the objectives suggested.

It is worth noting that land tenure has deep roots in national and ethnic cultures, and is reflected in an enormous variety of concepts (with both gross and subtle distinctions) among the nations of the developing world. Solutions which are not sensitive to this variety (which can frequently involve quite subtle distinctions) are unlikely to survive or ameliorate the problem at which they are aimed.

Given this situation, the categories used in this paper should be viewed as generalized attempts to organize an extraordinary variety of land tenure types into a useful conceptual framework. When it comes to actual translation into policy, however, the context of each project, the institutional milieu in which it will be placed, and the exact nature of the parties with interest in its effective execution must have major effects on policy decisions concerning appropriate tenure arrangements.

LAND TENURE OBJECTIVES RELATED TO TENURE TYPE

Type of Tenure	OBJECTIVES OF LAND TENURE FORMS					
	Efficiency in Land Productivity	Efficiency in Response to Demand	Efficiency in Urban Form	Individual and Social Equity	Compatibility with Other Policies	Continuity of Cultural and Political Conditions
COMMUNAL	Frequently result in inefficient productivity of land as dependent on communal decisions which may be "non-economic"	Usually not responsive to general market demand but only to members individual demands	Not likely to be responsive unless communal leadership perceives opportunities	Normally very equitable to members of the communal group	Likely to be incompatible & difficult to change	Obviously of communal tenure form is used it has deep cultural roots but maybe politically uncastable to modern governments
DEFACTO	Very high as squatters frequently use land passed over by market, but sometimes site invaded blocks potential for higher use	Often only available means of meeting low income group demand, but in ways not "optimal" for either households or public authorities	Quick to respond to "opportunities" for invasion created by changes in urban form but once occupied difficult to change land use through upgrading generally occurs spontaneously	Is by nature a reallocation of resources to low income groups but may have high indirect costs to occupiers, property-owners, and public authorities	Almost always is incompatible with other development policies. A key issue is how to make it compatible	Usually recognized as both culturally and politically not desirable
TEMPORARY	Can be excellent if appropriate changes are enforced at end of short term period of tenure	Not responsive to demand during short term of tenure, but can be adjusted at end of tenure period	Not likely to be responsive during short term period of tenure	Depends on social equity considerations of agency granting temporary tenure	Can be made compatible at time of issuance	Generally a new tenure concept and cultural and political factors will vary from country to country
SEMI-PERMANENT Private Leasehold	Can be good depending on lease conditions	Response is dependent on degree of imperfection on land market and public regulation	Can be responsive if terms of lease permit	Theoretically can be equitable but in practice frequently reflect inequalities in both economic & political power	May or may not be compatible. If not difficult to adopt	If available it is usually compatible
Public Leasehold	Dependent on public entity decisions. Public leaseholds frequently lose incentive to maximize productivity	Not responsive usually unless high degree of administrative efficiency present	Dependent on administrative decision	Depends on social equity concerns of administering authority	Can be made compatible at time of lease but once granted difficult to adopt	Normally highly compatible
PERMANENT Private Freehold	Can be good, but largely subject to private decisions as to use	Response is dependent on public regulations and individual decisions	Usually responsive to opportunities created by changes in urban form	Theoretically can be equitable but in practice frequently reflect inequalities in both economic and political power	May or may not be compatible. If not difficult to adopt if there is not expropriation laws	If available it is usually compatible
Public Freehold	Totally dependent on efficiency and administrative capacity of public entity	Not responsive usually unless a high degree of administrative efficiency present	Dependent on administrative decision	Depends on social equity concerns of public authority	Theoretically good, but frequently depends on inter-agency cooperation and coordination	Normally highly compatible
COMBINATION	Theoretically good, but highly dependent on administrative capability and public/private cooperation	Usually inefficient	Because of coordination requirements may be slow to respond but theoretically possible	If public land ownership is used for cross subsidies can be useful means of achieving social equity objectives	Can be made compatible at time of development or use rights, but may be difficult to change later	Generally a new tenure concept and cultural and political factors will vary country to country

1982 AID Shelter Workshop

AFFORDABILITY SESSION

TARGETING AND TARGET GROUPS: AN OUTLINE PAPER WITH READINGS

Prepared and Presented by

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Problem Set

The following material deals with establishing the priority targets in national housing programs. Participants should review the outline paper and examine the suggested readings.

Each participant should come to the session prepared to discuss how target groups are identified in his or her country if, indeed, they are. As you think about the following questions, please note your answers to at least one of them on a piece of paper for reference during the session and submission to the faculty following the discussion.

1. What sources of data are used in this process?
2. Are there special groups or categories of families other than the poor who are targeted for special programs?
3. If specific locations or types of location are targeted for programs, how is this done?
4. How are components of the shelter program matched with the needs and means of the intended beneficiaries?
5. How are over all estimates of national shelter need derived?
6. When your country allocates resources for programs in the shelter sector, is the whole expenditure for all types of shelter activity (including the subsidies in government housing) taken into account all together and matched up against the profile of over all national shelter needs?
7. How is the geographical distribution of shelter investment determined? By the private sector? The public sector?

TARGETING AND TARGET GROUPS: OUTLINE PAPER

I. Context of Housing Production and Policy

While some groups within a society are able to provide/purchase adequate shelter without governmental intervention, the proportion is small, particularly in developing countries.

A. Housing as the Focus of Early Efforts to Cope With Unmet Needs

Government normally undertakes a variety of programs or activities which influence the availability of shelter. These can include direct shelter construction, creation/licensing of financial institutions to provide mortgages, assembly and resale or disposition of housing sites to private parties or governmental institutions, subsidies of various kinds to civil servants or other favored groups.

When government has taken the shelter of lower-income households as a public policy objective, the predominant modes of intervention have been:

1. design and construction of dwellings for such households and
2. provision of subsidies for the occupants which may take a variety of forms but amount to government's absorbing the difference between sums which the poor can, or are asked to, pay and the real cost of construction and operations for such units.

Both developing and developed countries have used such approaches.

The history of such subsidized efforts has generally been that the volume of production falls well short of the need, and in spite of very high continuing costs to government, relatively few families have been housed.

In developing countries this approach has largely proven infeasible. Rural/urban migration has been so extensive that the conventional construction/subsidy approach has been unable to come at all close to meeting demand -- even for middle-income families who often displace the poor in subsidized housing allotments. The results have been proliferation of slums and squatter housing and considerable drain on the respective national treasuries.

B. Revising Ideas about How to Provide for Shelter Needs

To alleviate these problems many countries have begun to adopt different approaches to shelter provision for those unable to afford more conventional solutions. The approaches have involved the following basic techniques:

1. reduction in design and construction standards so that the funds available for shelter can be spread over more units;
2. greater reliance on self-help or individual construction and finishing of shelter;
3. gradual elimination of slum and squatter clearance efforts which displace families from these settlements in favor of upgrading existing self-built shelter and providing it with basic utilities and services;
4. evolution of sites and services programs for new shelter in which regularized plots are provided along with utilities and services; (Units are then built on these plots by contractors and/or the respective families to whom the plots are allotted.)

5. greater reliance on cost recovery from the individuals and families who benefit, thus allowing for replicability and wider distribution of housing funds;
6. establishment of financial instruments and institutions which provide credit geared to a broader spectrum of incomes, enabling a wider spectrum of families and individuals to take advantage of the opportunities;
7. creation of enterprise assistance and training programs which capitalize on the potential for employment and economic development inherent in these approaches;
8. encouragement, directly or tacitly, to rental of rooms or portions of units with a twofold objective: as an income supplement for the beneficiary; to provide for transients, migrants, elderly or other groups indirectly which even the more flexible approaches to housing provision cannot accommodate.

In short, as the demand for shelter -- particularly urban shelter -- has surpassed conventional means of providing shelter, governments have adopted more sensitive, flexible, cost effective and sophisticated techniques.

The "price" of adopting such techniques and using them efficiently has been the need for government to know more in advance about the population who are to be the beneficiaries of housing efforts. Choices are necessary for any support activity that involves limited resources. By identifying the groups to be served through shelter programs and by understanding key characteristics of these groups, those who plan the shelter programs can design them more effectively.

II. The Process of Identifying "Target" Population

The process of identifying in advance the populations to be served by a shelter program is called "targeting". The population to be served is called the "target" group or groups. Tools employed in targeting are: national and local statistics, special surveys, and the carefully formulated assumptions (when such statistics or survey material exist in only rudimentary form or not at all).

A. The "Who" of Targeting: the "Poor" and Others

Some analysts suggest that all households below a certain minimum income level -- which will vary from country to country -- be considered the target group. Income is used as a gross, "short-hand" index of how effectively one can obtain shelter and other services. When a national income distribution is available it is possible to determine what is the "poverty" level and to gear shelter assistance to households at or below this level.

The concept of poverty alone is, however, too simplistic to be the sole basis for allocating resources and for designing shelter programs. Income levels, purchasing power, and costs may vary considerably between urban and rural areas and between areas of the country. Rural households at poverty income levels may be able to satisfy their minimal shelter needs adequately by building their own houses with traditional materials and methods -- solutions no longer satisfactory when applied under the densities and other conditions of the urban setting.

In rapidly expanding urban areas there may be few options for obtaining minimally adequate shelter because of institutional and other barriers, for example: lack of available sites, excessively high construction standards or overly restrictive credit terms. As a result, even families whose incomes are above poverty level may be unable to obtain adequate shelter, and may be found

living among the informal settlement areas. These households merit inclusion in the target population for housing program efforts, in addition to those below "poverty" income levels.

Thus, income levels may be only one of several factors to consider in a targeting exercise.

B. Identifying Target Locations: The "Where" of Targeting

Sufficient information should be available through central government sources to determine some priorities for location of housing efforts.

Where are the principal shelter problems, or opportunities, unmet by present institutions or private effort? Are these in rural areas, urban areas or both? If in cities, are the "priority" locations the capital or chief city, secondary centers, sections of individual cities such as defined squatter areas, or combinations of these?

Once the "where" of targeting has been defined, then it becomes possible to utilize income and other data to begin to identify appropriate target group(s) for the shelter programs.

C. Demographic/Economic Analyses and Profiles

Obtaining accurate and current population statistics by location may be difficult. Approximations and assumptions by skilled analysts become crucial.

The data tools National and local censuses, information from social security systems, public health statistics, and special surveys of squatter areas are all material which can be probed and arrayed to construct population profiles of the target areas by:

1. income levels (i.e. identification of high, middle, low by as discriminating categories as possible).
2. type of current shelter (e.g. conventional, squatter units, etc.)
3. cost of current shelter solutions
4. household size and composition
5. employment/unemployment levels (taking into account the wage sector, informal sector activity, women in the labor force, etc.)

Appended to this paper is a case study of a housing survey in Swaziland. This survey brings together data and assumptions from many sources to formulate "profiles" of population in need of shelter.

III. Affordability Analysis

While population and income profiles can provide insights into the present level of shelter needs in the target area(s), they are still not sufficient to illuminate these needs or serve as basis for a program. It is necessary to follow up with affordability analyses and special surveys. Affordability analysis indicates what forms of housing the range of income levels in the target areas can purchase (or rent) under present conditions, given:

an estimated proportion or proportions (for various income levels) spent on shelter,

the costs (for land and building) of prototypical shelter currently tested and buildable in the country, and

the financing arrangements currently available to residents of the target areas/members of the target population.

A. Proportion of Income Available for Housing.

Countries vary in respect to the proportion of current income households spend on shelter, and even within a given country

the proportions differ among income groups. (See page 2 of the paper by Anthony Churchill of the World Bank which is appended as an additional reading.) Churchill cites shelter budgets ranging from a low of 6.5 per cent for low income households in Madras, India, to a high of 27 per cent in Jamaica. He suggests that in low income countries an average expenditure may be 15 per cent and in middle income countries it could go as high as 25 per cent. Today in the United States we find many middle-income people spending as much as 30 to 35 percent of household income for shelter.

The point is that some data, or assumptions, are necessary to identify the proportion of income target groups are spending today on shelter. This will give some basic idea of how much they would be prepared to spend if broader opportunities for adequate shelter were made available. (Should such opportunities actually be made available there have been examples, as in Tunisia, where a target group will actually spend a higher proportion of income because they now have a realistic reason for doing so.) Data and estimates of current housing expenditures should be broken down fairly precisely between expenses for the shelter unit alone, and those for utilities, services and furnishings.

Based on such findings government shelter program planners in many countries set as a goal or policy target some level they consider a feasible, acceptable share household income to be allocated for family shelter. The target level may vary for different segments of the target population depending, for example, on how much in absolute terms families must spend on minimum subsistence requirements of other basics such as food and drinking water.

B. Shelter Types Available

The second step of an affordability analysis is identifying the types and cost ranges of shelter units currently buildable within the country. These can range from luxury apartments and

individual homes to simple sites and services. It is especially important to identify the cost components of minimal standard shelter -- which may or may not be currently available -- but whose construction feasibility has been determined. These would include squatter settlement upgrading, core housing, sites and services etc. If such unit types or estimates do not exist, then some approximations based on best available information should be established.

The basic question is: given potential, acceptable household shelter expenditures by various segments of the target group, what kinds of physical solutions can realistically be provided for them, assuming that credit financing opportunities are made available?

C. Financing Arrangements

Existing shelter financing arrangements and capacities should be reviewed to determine what is available for shelter and the extent to which these resources can be relied on to meet foreseeable shelter needs, particularly those of the target population. These analyses are extremely important.

It may be that current financial mechanisms, interest rates, amortization periods, etc. are adaptable to serve households across a wide range of income levels who could afford to pay for shelter appropriate to their respective resources, but that the level of funds available and/or the institutional capacity to administer a mortgage credit program are insufficient to meet the scale of the need. In such a case the analysis would suggest that a principal objective in program development would be to increase the level of funding available to the existing institutions. In Tunisia, for example, a wide array of private and governmental financing techniques are available for low-income families to finance core housing and sites-and-services plots. That these

institutions do not serve more households is mainly a function of limitations on their working capital.

Elsewhere the financial systems may have inherent institutional constraints that render them unable to serve but a narrow segment of the population. In the Swaziland case study, we learn that shelter financing instruments are so designed and administered as to serve only the upper income groups, particular industries and professions, or a relatively limited group of households within the larger population, the government employees who are subsidized so they can occupy housing built to standards above what they could afford on their salaries alone. Under these conditions, program efforts would be required to broaden the financial mechanisms themselves as well as to increase the level of resources to be channeled through them.

IV. The "What" of Targeting: Components of an Affordable Program

A. Analyzing the Needs of the Designated Target Group(s)

Existing statistics, supplemented by analyses and assumptions are appropriate in making the initial identification of target groups. They are normally inadequate, however, to serve as a solid basis for program and project design to serve these groups.

Where possible, special interview surveys of needs, attitudes, and present living patterns are desirable for moving into actual design. These surveys should be conducted by trained interviewers who can establish good rapport with the people in target areas. (An example of just such a survey, in Swaziland, is also appended among the additional readings.) With such a survey, the following types of information can be elicited prior to project/program design:

1. adequacy and use patterns of existing shelter
2. actual income and expenditure patterns
3. employment patterns, skills, women in labor force
4. ability to save and willingness to devote income to housing expenditures
5. attitudes towards various shelter options (sites and services, apartments, upgrading, self-help schemes)
6. family size and composition
7. profile of renters
8. transportation costs and modes

B. Identifying Solutions To Meet the Needs of the Target Group(s)

The next step is to match affordable shelter solutions against income levels and other characteristics of the target population. (See the appended chart from the Swaziland case study which identifies income levels of potential target groups, and the type of physical shelter provisions each could afford under certain assumptions of available financing.)

From this type of assessment, it should be possible to identify the class or classes of population to be served in a housing program, and to understand which facets of a comprehensive shelter program should be directed to each.

It should be determined, at this point, how much of the percentile scale for household incomes and shelter needs can be served through measures to improve the conventional delivery system, e.g. making appropriate building sites available, revising codes so as to permit a wider variety of housing types and tenure (especially the more affordable and somewhat higher density attached housing and multifamily types of design for rental or

condominium ownership), or changes in credit terms which result in down payments or monthly instalments within a level these households can manage to pay.

Needs of income groups below this threshold of service level should then be studied to determine which types of more direct assistance are necessary to enable them to secure adequate shelter. Measures geared to them may range from government-sponsored sites and services to squatter settlement upgrading projects, to special mortgage credit arrangements such as loans for building materials and technical assistance in building their own housing suitable in a manner suitable for the urban setting, to activities for enhancing their income-earning abilities -- or combinations of several of these. Some households at the lowest ends of the income spectrum may require welfare payments or other forms of income supplement in addition to direct shelter assistance.

It is good policy, in this matching of program measures against needs, to match the standards of shelter solutions as closely as possible to the potential occupants' ability to pay. The object is to stretch available resources by going as far down the income scale as possible before applying any solution that involves subsidy.

V. Design of an Affordable Program

Once the data and assumptions have been arrayed to identify the target groups, the scale of their respective needs and the range of appropriate shelter solutions to meet those needs, the general scheme of the shelter program begins to take form. Next, this general scheme needs to be tailored realistically to the amount of resources available for the shelter program and to the capacity of the institutions which will be responsible for implementing it.

Some estimate of how long it will take to carry out the various elements of the program can then be made in light of these last two factors. This is important if shelter policy-makers are to understand the implications of program scale for the crucial, central questions of who will be served, how and when.

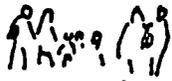
Answers to the following questions may lead to some changes in the relative scale or timing of individual program elements:

- A. Which elements of the shelter program involve government intervention primarily in institutional changes, legislative initiatives, relaxation of standards or other measures that do not necessarily require major capital or recurrent budget allocations?
- B. Given the level of funding potentially available, what priorities should be observed in selecting physical solutions for the target group and its component segments, e.g. where, and for whom, are existing problems the greatest? . . . where and for whom, will future needs be particularly acute? . . . which aspects of the shelter program outlined in the foregoing steps present opportunities for fairly early implementation? . . . which will take longer to develop?
- C. What financing arrangements and other program elements especially geared to the needs of the target group represent the most promising opportunities for full cost recovery, minimizing subsidies and covering associated recurrent costs?
- D. What will the tenure arrangements be for the target groups (i.e. freehold, land leasing, rental, etc.)
- E. How large a scale of effort will be attempted, and over what time period?

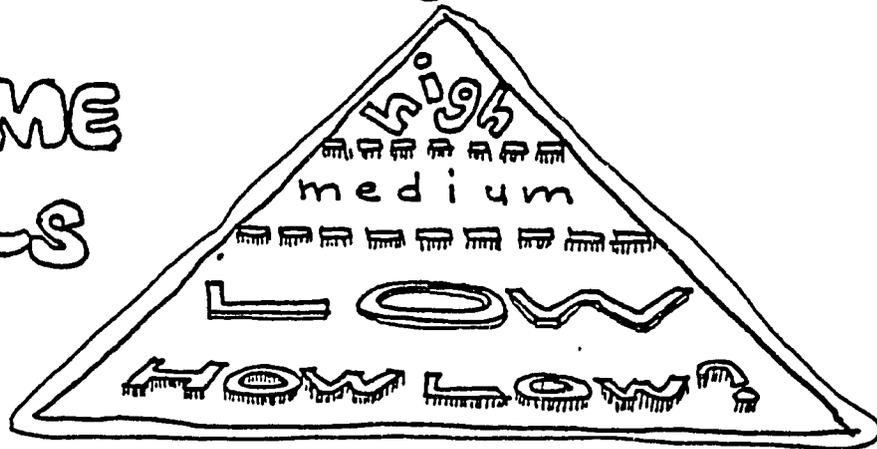
Some of these questions go beyond the process, strictly speaking, of identifying the target group and its component subgroups. They are significant, however, in as much as they bear on crucial choices when it comes time to translate the target group identities, target locations and targeted program elements into program priorities.

The Targeting Concept

— A PEOPLE CENTERED BASIS FOR SHELTER POLICY AND PROGRAMS

Who — to target for effort? 

INCOME LEVELS



HOUSEHOLD SIZE



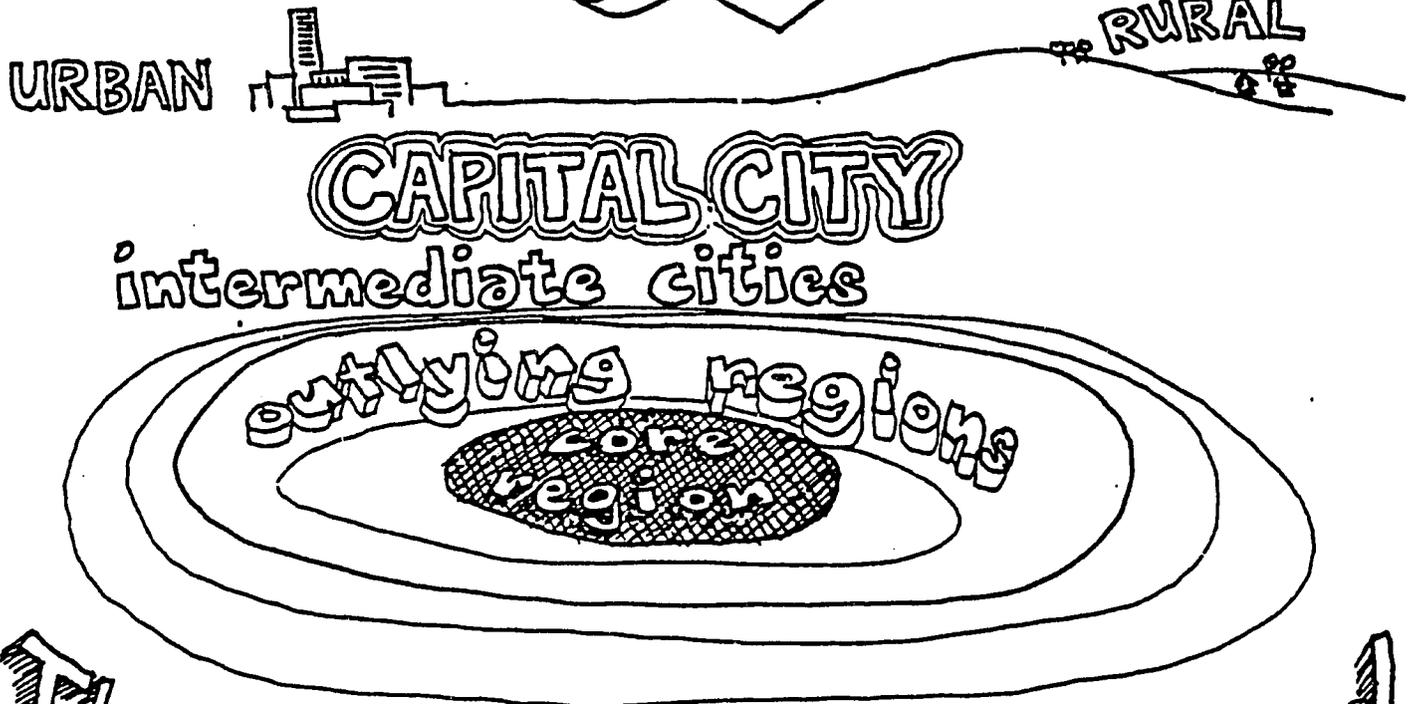
The Targeting Concept



— A PEOPLE CENTERED BASIS FOR SHELTER
POLICY AND PROGRAMS



Where?

A large, hand-drawn arrow pointing to the right, starting from the word 'Where?' and pointing towards the diagram below.

The need for priorities and
choices by location

The Targeting Concept

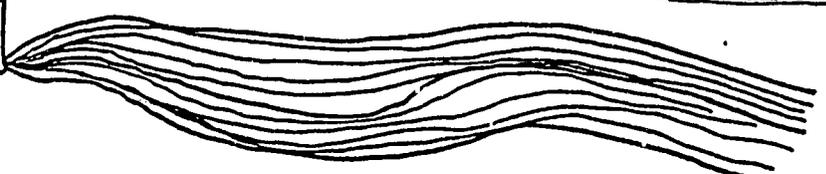
— A PEOPLE CENTERED BASIS FOR SHELTER POLICY AND PROGRAMS

AVVA (V) ?

What — to target for effort?

shelter 

land 

tenure 

materials 

Financing

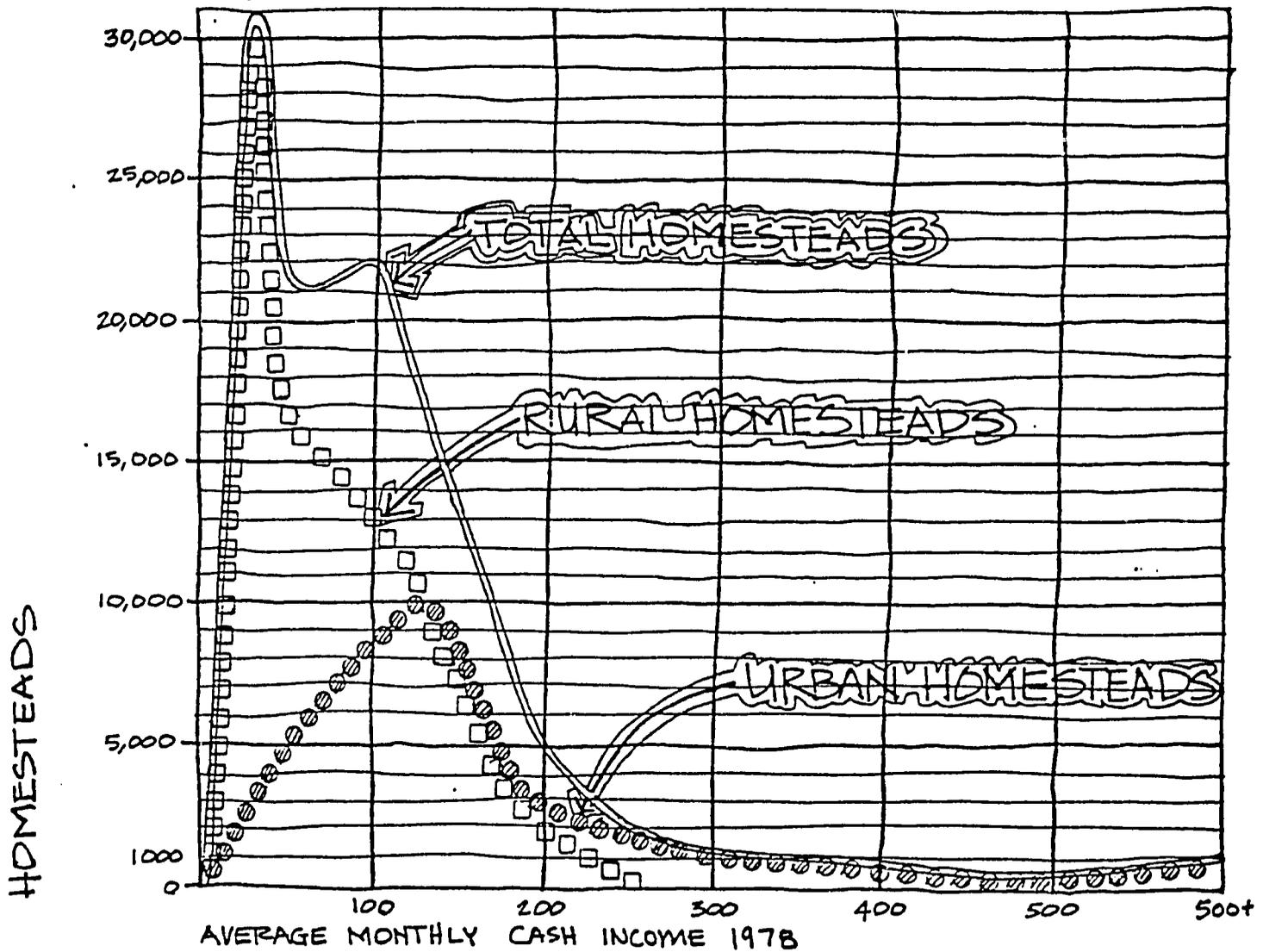
employment

transportation 

IDENTIFYING THE TARGET GROUP BY INCOME LEVELS AND LOCATIONS

step 1: what is the present
income distribution
nationally?

case study Swaziland



IDENTIFYING THE TARGET GROUP BY INCOME LEVELS AND LOCATIONS

step 2: if urban areas are identified for special treatment, what is the income distribution within urban areas for non-squatter and squatter families.

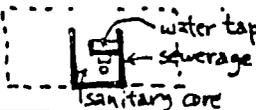
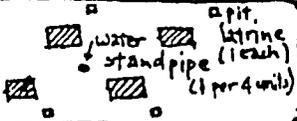
case study Swaziland

Income	urban families	core region urban families	core region urban families in informal sector housing - squatter areas - slums
high (E350+)			
medium (E160-350)			
low (under E160)			

IDENTIFYING THE TARGET GROUP BY INCOME LEVELS AND LOCATIONS

step 3: if core region urban families in squatter housing are to be the target group - what types of solutions could they afford at present income levels, state of the construction art and nature of financing available?

case study Swaziland LOW INCOME FAMILIES IN SQUATTER AREAS OF THE PRINCIPAL CITIES (CORE REGION)

monthly income	no. of families	%	affordable solution
E135 - 160	1,010	12%	one bedroom house (E4140) at 25% of income 37 m ² gross building area one bedroom 12.8 units per acre 
E 110 - 135	1,430	17%	full sites & services (E3000) at 25% of income 330 m ² plots - 6 units per acre no electricity 
E 75 - 110	2,560	31%	basic sites & services (E1500) at 25% of income 12 plots per acre 
E 45 - 75	1,990	24%	squatter upgrading (E 400) 10% of income pit latrines 6-foot paths other projects as called for
LESS THAN E45	1,310	16%	
TOTAL LOW INCOME FAMILIES IN SQUATTER AREAS OF PRINCIPAL CITIES (CORE REGION)	8,300	100%	

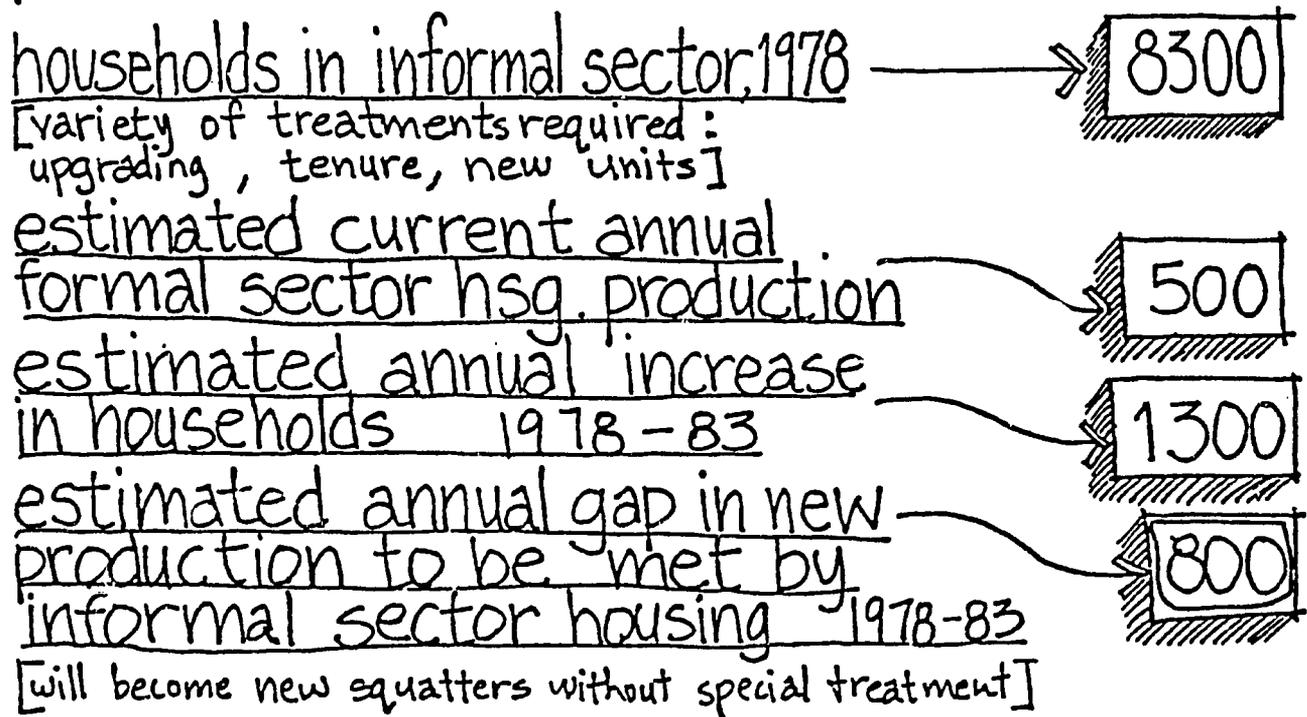
IDENTIFYING THE TARGET GROUP BY INCOME LEVELS AND LOCATIONS

step 4: add the present shelter needs of target population to estimated growth requirements.

case study Swaziland

core region

present scale of need:



AID Shelter Workshop
Affordability Session

TARGETING AND TARGET GROUPS: SUPPLEMENTARY READINGS

- A. Excerpt on Housing Needs and Target Population from Swaziland Shelter Sector Assessment by Rivkin Associates Inc. and Carl House, USAID, 1978.
- B. Basic Needs in Shelter, by Anthony Churchill, IBRD, 1979.

Notes on Readings:

The Swaziland material demonstrates how data were used and assumptions, made to identify groups for whom shelter assistance would be designed in one African country. It also includes a questionnaire that was administered to residents in squatter areas to learn about income patterns, attitudes, et al. The most important aspect of this material is the way in which the analysts made assumptions based on limited reliable data. While the assumptions remain to be tested, they provided at least an initial basis for identifying the potential beneficiaries of the housing program.

Churchill's paper is an excellent global overview of basic shelter needs and a potential role for international institutions. Its appendix provides data on household incomes and expenditures for several countries.

TARGETING AND TARGET GROUPS:

AN OUTLINE PAPER WITH READINGS

Prepared and Presented by

Malcolm D. and Goldie W. Rivkin

Problem Set

The following material deals with the subject of establishing the target group or groups for priority in national housing programs. Participants should review the outline paper and make an effort to examine the suggested readings. Each participant should come to the session prepared to discuss how target groups are identified in his or her country if, indeed, they are. What sources of data are used in this process? Are there special groups or categories of families other than the poor who are targeted for special programs? If specific locations or types of location are targeted for programs, how is this done? How are components of the shelter program matched with the needs and means of the intended beneficiaries? How are over all estimates of national shelter need derived? Does the country allocate resources for programs in the shelter sector in light of over all assessment of national needs? If so, are all types of shelter activities taken into account when analyzing the relationships between the distribution of resources and the profile of national shelter needs (e.g. the total value of the subsidy which government housing represents for those classes of families who occupy it)? How is the geographical distribution of shelter investment determined? As you think about these questions please note your answers to at least one of them on a piece of paper for reference during the session and submission after the discussion.

TARGETING AND TARGET GROUPS: AN OUTLINE PAPER WITH READINGS

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	B. Anthony Churchill, <u>Basic Needs in Shelter</u>	

Targeting and Target Groups: An Outline Paper with Readings

Context of Housing Production and Policy

While some groups within a society are able to provide/purchase adequate shelter without governmental intervention, the proportion is small, particularly in developing countries.

I. Housing as the Focus of Early Efforts to Cope With Unmet Needs

Government normally undertakes a variety of programs or activities which influence the availability of shelter. These can include direct shelter construction, creation/licensing of financial institutions to provide mortgages, assembly and resale or disposition of housing sites to private parties or governmental institutions, subsidies of various kinds to civil servants or other favored groups.

When government has taken the shelter of lower-income households as a public policy objective, the predominant modes of intervention have been:

- A. design and construction of dwellings for such households and
- B. provision of subsidies for the occupants which may take a variety of forms but amount to government's absorbing the difference between sums which the poor can, or are asked to, pay and the real cost of construction and operations for such units.

Both developing and developed countries have used such approaches.

The history of such subsidized efforts has generally been that the volume of production falls well short of the need, and in spite of very high continuing costs to government, relatively few families have been housed.

In developing countries this approach has largely proven infeasible. Rural/urban migration has been so extensive that the conventional construction/subsidy approach has been unable to come at all close to meeting demand -- even for middle-income families who often displace the poor in subsidized housing allotments. The results have been proliferation of slums and squatter housing and considerable drain on the respective national treasuries.

B. Revising Ideas about How to Provide for Shelter Needs

To alleviate these problems many countries have begun to adopt different approaches to shelter provision for those unable to afford more conventional solutions. The approaches have involved the following basic techniques:

1. reduction in design and construction standards so that the funds available for shelter can be spread over more units;
2. greater reliance on self-help or individual construction and finishing of shelter;
3. gradual elimination of slum and squatter clearance efforts which displace families from these settlements in favor of upgrading existing self-built shelter and providing it with basic utilities and services;
4. evolution of sites and services programs for new shelter in which regularized plots are provided along with utilities and services; (Units are then built on these plots by contractors and/or the respective families to whom the plots are allotted.)
5. greater reliance on cost recovery from the individuals and families who benefit, thus allowing for replicability and wider distribution of housing funds;

6. establishment of financial instruments and institutions which provide credit geared to a broader spectrum of incomes, enabling a wider spectrum of families and individuals to take advantage of the opportunities;
7. creation of enterprise assistance and training programs which capitalize on the potential for employment and economic development inherent in these approaches;
8. encouragement, directly or tacitly, to rental of rooms or portions of units with a twofold objective: as an income supplement for the beneficiary; to provide for transients, migrants, elderly or other groups indirectly which even the more flexible approaches to housing provision cannot accommodate.

In short, as the demand for shelter — particularly urban shelter — has surpassed conventional means of providing shelter, governments have adopted more sensitive, flexible, cost effective and sophisticated techniques.

The "price" of adopting such techniques and using them efficiently has been the need for government to know more in advance about the population who are to be the beneficiaries of housing efforts. Choices are necessary for any support activity that involves limited resources. By identifying the groups to be served through shelter programs and by understanding key characteristics of these groups, those who plan the shelter programs can design them more effectively.

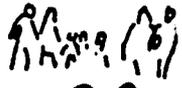
II. The Process of Identifying "Target" Population

The process of identifying in advance the populations to be served by a shelter program is called "targeting". The population to be served is called the "target" group or groups. Tools employed in targeting are

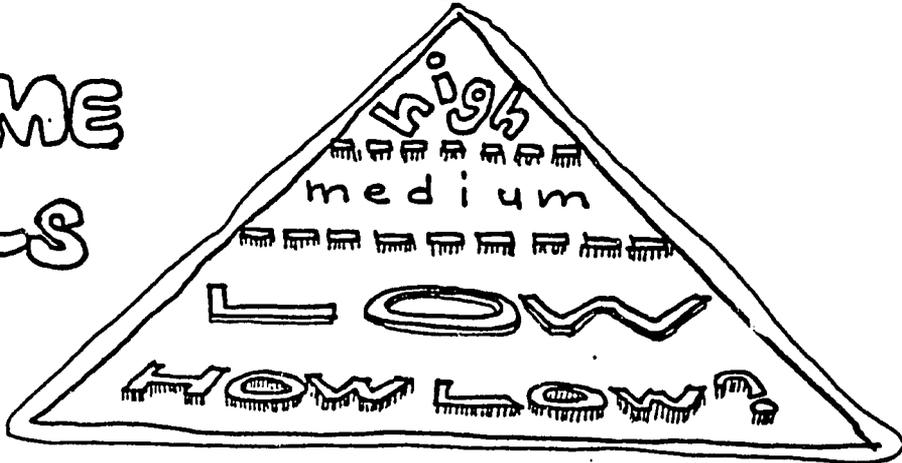
The Targeting Concept



— A PEOPLE CENTERED BASIS FOR SHELTER
POLICY AND PROGRAMS

Who — to target for effort? 

INCOME
LEVELS



HOUSEHOLD SIZE



national and local statistics, special surveys, and the careful formulation of assumptions when such statistics or survey material exist in only rudimentary form or not at all.

A. The "Who" of Targeting: the "Poor" and Others

Some analysts suggest that all households below a certain minimum income level -- which will vary from country to country -- be considered the target group. Income is used as a gross, "short-hand" index of how effectively one can obtain shelter and other services. When a national income distribution is available it is possible to determine what is the "poverty" level and to gear shelter assistance to households at or below this level.

The concept of poverty alone is, however, too simplistic to be the sole basis for allocating resources and for designing shelter programs. Income levels, purchasing power, and costs may vary considerably between urban and rural areas and between areas of the country. Rural households at poverty income levels may be able to satisfy their minimal shelter needs adequately by building their own houses with traditional materials and methods -- solutions no longer satisfactory when applied under the densities and other conditions of the urban setting.

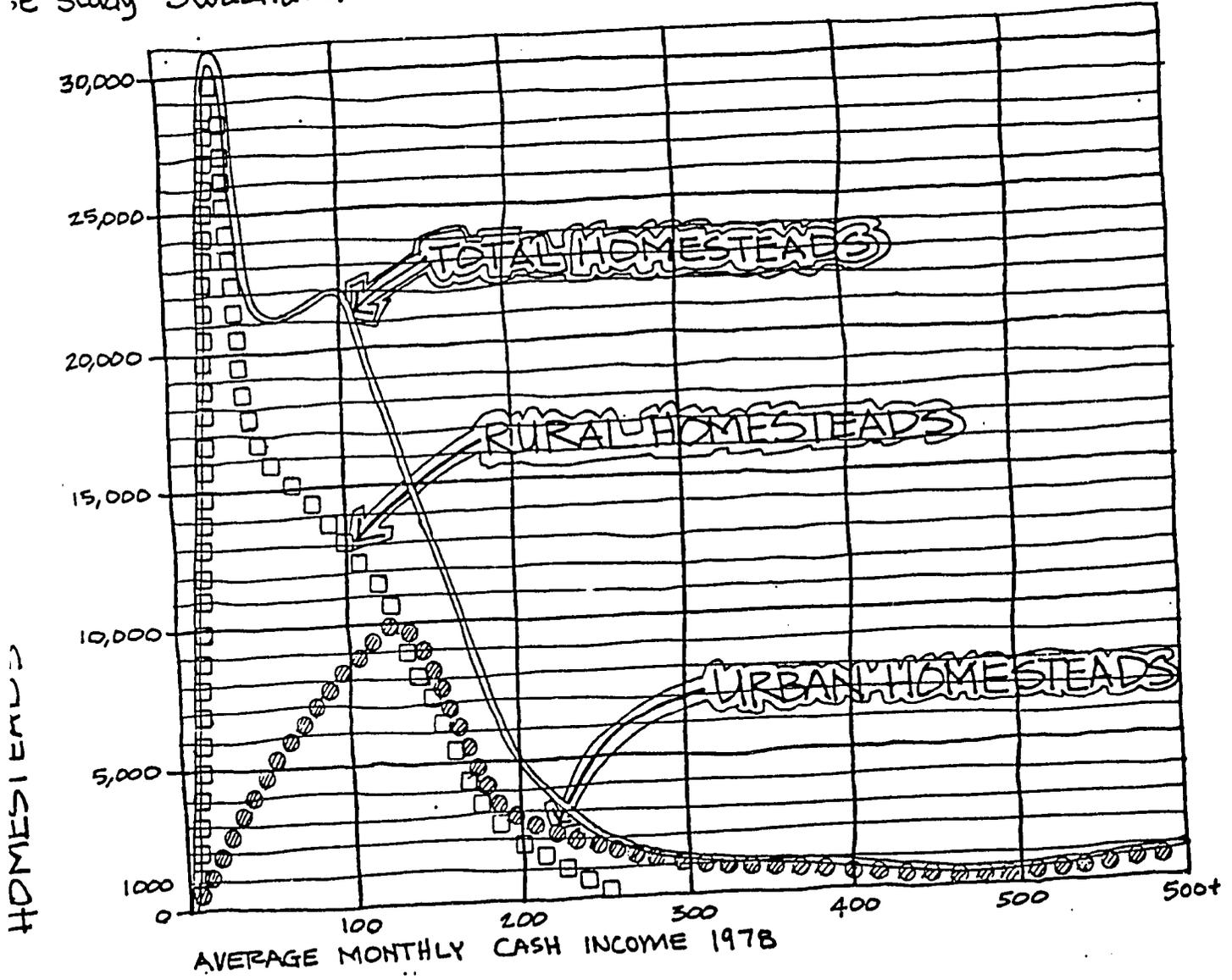
In rapidly expanding urban areas there may be few options for obtaining minimally adequate shelter because of institutional and other barriers, for example: lack of available sites, excessively high construction standards or overly restrictive credit terms. As a result, even families whose incomes are above poverty level may be unable to obtain adequate shelter, and may be found living among the informal settlement areas. These households merit inclusion in the target population for housing program efforts, in addition to those below "poverty" income levels.

Thus, income levels may be only one of several factors to be considered in a targeting exercise.

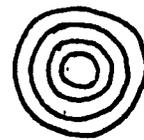
IDENTIFYING THE TARGET GROUP INCOME LEVELS AND LOCATIONS

Step 1: what is the present
income distribution
nationally?

the study Swaziland



The Targeting Concept



— A PEOPLE CENTERED BASIS FOR SHELTER
POLICY AND PROGRAMS



Where?

A hand-drawn arrow pointing to the right, starting from the end of the word 'Where?' and curving downwards.

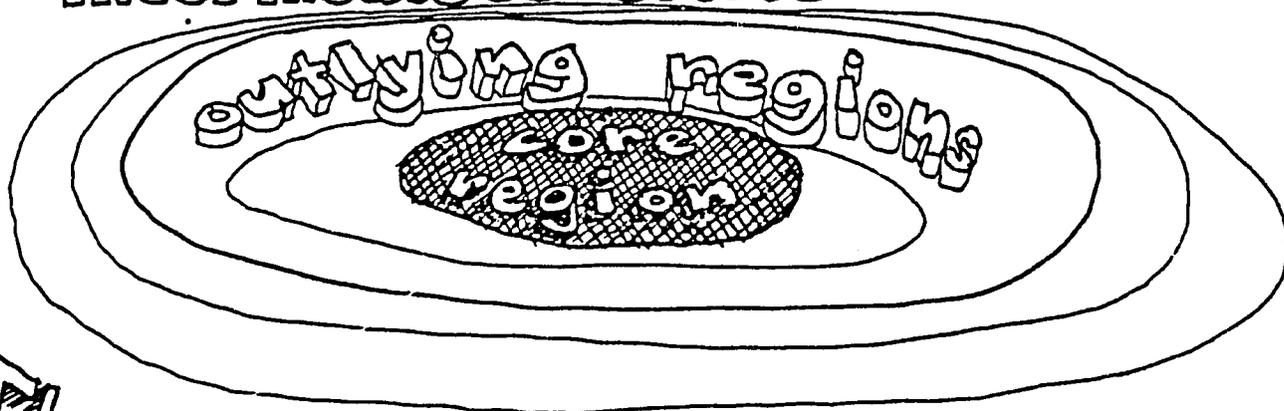
URBAN



RURAL



CAPITAL CITY
intermediate cities



**The need for priorities and
choices by location**

B. Identifying Target Locations: The "Where" of Targeting.

Sufficient information should be available through central government sources to determine some priorities for location of housing efforts.

Where are the principal shelter problems , or opportunities, unmet by present institutions or private effort? Are these in rural areas, urban areas or both? If in cities, are the "priority" locations the capital or chief city, secondary centers, sections of individual cities such as defined squatter areas, or combinations of these?

Once the "where" of targeting has been defined, then it becomes possible to utilize income and other data to begin to identify appropriate target group(s) for the shelter programs.

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Obtaining accurate and current population statistics by location may be difficult. Approximations and assumptions by skilled analysts become crucial.

The data tools National and local censuses, information from social security systems, public health statistics, and special surveys of squatter areas are all material which can be probed and arrayed to construct population profiles of the target areas by:

income levels (i.e. identification of high, middle, low by as discriminating categories as possible).

type of current shelter (e.g. conventional, squatter units, etc.)

cost of current shelter solutions

household size and composition

IDENTIFYING THE TARGET GROUP BY INCOME LEVELS AND LOCATIONS

step 2: if urban areas are identified for special treatment, what is the income distribution within urban areas for non-squatter and squatter families

case study Swaziland

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The point is that some data, or assumptions, are necessary to identify the proportion of income target groups are spending today on shelter. This will give some basic idea of how much they would be prepared to spend if broader opportunities for adequate shelter were made available. (Should such opportunities actually be made available there have been examples, as in Tunisia, where a target group will actually spend a higher proportion of income because they now have a realistic reason for doing so.) Definition of existing housing expenditures needs to be precise, moreover, identifying whether the categories are for the shelter unit alone, or include furnishings and utilities.

Based on such findings government shelter program planners in many countries set as a goal or policy target some level they consider a feasible, acceptable share household income to be allocated for family shelter. The target level may vary for different segments of the target population depending, for example, on how much in absolute terms families must spend on minimum subsistence requirements of other basics such as food and drinking water.

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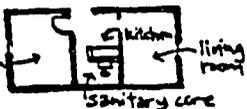
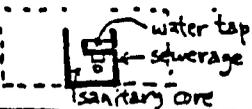
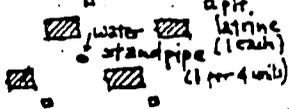
It may be that current financial mechanisms, interest rates, amortization periods, etc. are adaptable to serve households across a wide range of income levels who could afford to pay for shelter appropriate to their respective resources, but that the level of funds available and/or the institutional capacity to administer a mortgage credit program are insufficient to meet the scale of the need. In such a case the analysis would suggest that a principal objective in program development would be to increase the level of funding available to the existing institutions. In Tunisia, for example, a wide array of private and governmental financing techniques are available for low-income families to finance core housing and sites-and-services plots. That these institutions do not serve more households is mainly a function of limitations on their working capital.

Elsewhere the financial systems may have inherent institutional constraints that render them unable to serve but a narrow segment of the population. In the Swaziland case study, we learn that shelter financing instruments are so designed and administered as to serve only the upper income groups, particular industries and professions or a relatively limited group of households within the larger

IDENTIFYING THE TARGET GROUP BY INCOME LEVELS AND LOCATIONS

step 3: if core region urban families in squatter housing are to be the target group - what types of solutions could they afford at present income levels, state of the construction art and nature of financing available?

case study Swaziland LOW INCOME FAMILIES IN SQUATTER AREAS OF THE PRINCIPAL CITIES (CORE REGION)

monthly income	no. of families	%	affordable solution
E135 - 160	1,010	12%	one bedroom house (E4140) at 25% of income 37 m ² gross building area one bedroom 12.8 units per acre 
E110 - 135	1,430	17%	full sites & services (E3000) at 25% of income 330 m ² plots - 6 units per acre no electricity 
E75 - 110	2,560	31%	basic sites & services (E1500) at 25% of income 12 plots per acre 
E45 - 75	1,990	24%	squatter upgrading (E400) 10% of income pit latrines foot paths other projects as called for
LESS THAN E45	1,310	16%	
TOTAL LOW INCOME FAMILIES IN SQUATTER AREAS OF PRINCIPAL CITIES (CORE REGION)	8,300	100%	

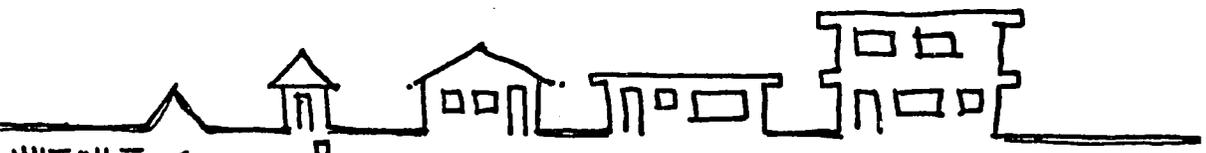
The Targeting Concept

— A PEOPLE CENTERED BASIS FOR SHELTER POLICY AND PROGRAMS

AM... 1/10 ?

What — to target for effort?

shelter



land

tenure

materials



Financing

employment



transportation



population, the government employees who are subsidized so they can occupy housing built to standards above what they could afford on their salaries alone. Under these conditions, program efforts would be required to broaden the financial mechanisms themselves as well as to increase the level of resources to be channeled through them.

IV. The "What" of Targeting: Components of an Affordable Program

A. Analyzing the Needs of the Designated Target Group(s)

Existing statistics, supplemented by analyses and assumptions are appropriate in making the initial identification of target groups. They are normally inadequate, however, to serve as a solid basis for program and project design to serve these groups.

Where possible, special interview surveys of needs, attitudes, and present living patterns are desirable for moving into actual design. These surveys should be conducted by trained interviewers who can establish good rapport with the people in target areas. (An example of just such a survey, in Swaziland, is also appended among the additional readings.) With such a survey, the following types of information can be elicited prior to project/program design:

- adequacy and use patterns of existing shelter
- actual income and expenditure patterns
- employment patterns, skills, women in labor force
- ability to save and willingness to devote income to housing expenditures
- attitudes towards various shelter options (sites and services, apartments, upgrading, self-help schemes)
- family size and composition
- nature of renters
- transportation costs and modes

B. Identifying Solutions To Meet the Needs of the Target Group(s)

The next step is to match affordable shelter solutions against income levels and other characteristics of the target population. (See the appended chart from the Swaziland case study which identifies income levels of potential target groups, and the type of physical shelter provisions each could afford under certain assumptions of available financing.)

From this type of assessment, it should be possible to identify the class or classes of population to be served in a housing program, and to understand which facets of a comprehensive shelter program should be directed to each.

A determination should be made at this point respecting how far down the income spectrum, shelter needs can be met through measures to improve the conventional delivery system, e.g. making appropriate building sites available, revising codes so as to permit a wider variety of housing types and tenure (especially the more affordable and somewhat higher density attached housing and multifamily types of design for rental or condominium ownership), or changes in credit terms which result in down payments or monthly instalments within a level these households can manage to pay.

Needs of income groups below this level should then be studied to determine which types of more direct assistance are necessary to enable them to secure adequate shelter. Measures geared to them may range from government-sponsored sites-and-services to squatter settlement upgrading projects, to special mortgage credit arrangements such as loans for building materials and technical assistance in building their own housing suitable in a manner suitable for the urban setting, to activities for enhancing their income-earning abilities -- or combinations of several of these. Some households at the lowest ends of the income spectrum may require welfare payments or other forms of income supplement in addition to direct shelter assistance.

IDENTIFYING THE TARGET GROUP BY INCOME LEVELS AND LOCATIONS

step 4: add the present shelter needs
of target population to estimated
growth requirements

case study Swaziland

core region

present scale of need:

households in informal sector, 1978 → 8300

[variety of treatments required:
upgrading, tenure, new units]

estimated current annual
formal sector hsg. production → 500

estimated annual increase
in households 1978-83 → 1300

estimated annual gap in new
production to be met by
informal sector housing 1978-83 → 800

[will become new squatters without special treatment]

It is good policy, in this matching of program measures against needs, to match the standards of shelter solutions as closely as possible to the potential occupants' ability to pay. The object is to stretch available resources by going as far down the income scale as possible before applying any solution that involves subsidy.

V. Design of an Affordable Program

Once the data and assumptions have been arrayed to identify the target groups along with a measure of the scale of their needs and a range of appropriate shelter solutions to meet those needs, the general program scheme needs to be tailored realistically to the level of resources available for the shelter program and to the capacity of the institutions which will be responsible for implementation.

It should be possible at this stage to ask, and to answer, the following questions:

1. Which elements of the shelter program involve government intervention primarily in institutional changes, legislative initiative, relaxation of standards or other measures that do not necessarily require major capital or recurrent budget allocations?
2. Given the level of funding potentially available, what priorities should be observed in selecting physical solutions for the target group and its component segments, e.g. where, and for whom, are existing problems the greatest? . . . where and for whom, will future needs be particularly acute? . . . which aspects of the shelter program outlined in the foregoing steps present opportunities for fairly early implementation? . . . which will take longer to develop?
3. What financing arrangements and other program elements especially geared to the needs of the target group represent the most promising opportunities for full cost recovery, minimizing subsidies and covering associated recurrent costs?
4. What will the tenure arrangements be for the target groups (i.e. freehold, land leasing, rental, etc.)

5. How large a scale of effort will be attempted, and over what time period?

Some of these questions go beyond the process, strictly speaking, of identifying the target group and its component subgroups. They are significant, however, in as much as they bear on crucial choices when it comes time to translate the target group identities, target locations and targeted program elements into program priorities.

AID Shelter Training Workshop

TARGETING AND TARGET GROUPS

SUPPLEMENTARY READINGS

- A. **Excerpt on Housing Needs and Target Population from Swaziland Shelter Sector Assessment by Rivkin Associates Inc. and Carl House, USAID, 1978.**
- B. **Basic Needs in Shelter, by Anthony Churchill, IBRD, 1979.**

Notes on Readings:

The Swaziland material demonstrates how data were used and assumptions, made to identify groups for whom shelter assistance would be designed in one African country. It also includes a questionnaire that was administered to residents in squatter areas to learn about income patterns, attitudes, et al. The most important aspect of this material is the way in which the analysts made assumptions based on limited reliable data. While the assumptions remain to be tested, they provided at least an initial basis for identifying the potential beneficiaries of the housing program.

Churchill's paper is an excellent global overview of basic shelter needs and a potential role for international institutions. Its appendix provides data on household incomes and expenditures for several countries.

A. Excerpts on Housing Needs and Target Population
from
Swaziland Shelter Sector Assessment,
Rivkin Associates, Inc. in Association with
Carl House, USAID, 1978.

v. Shelter Needs, 1978-83

A. Scale of the Need, Location and Components

Population growth and movement within Swaziland has had a dramatic impact on urban shelter needs. In the Core Region, 790 new urban and peri-urban households¹ were added each year between 1966 and 1976--295 in the Mbabane area, 300 in the Manzini-Kwaluseni-Matsapa area, and the balance in communities between.

Elsewhere in Swaziland, too, the number of new urban households exceeded the rural. This was due partly to the smaller household size in the towns and villages and largely to the attraction of new job opportunities. Table V-1 illustrates the average annual increment of households for several of Swaziland's urban areas. In many respects this dispersion of urban growth is fortunate. Although squatter conditions have developed in a number of places, they do not constitute so massive and intractable a problem as they might were they concentrated in a single urban center.

Situation of Needs Outpacing Housing Production. Annual production of housing through the formal sector has simply not kept pace with the rate of urban household formation. The shortage of formal housing affects families at all levels of the income scale.

Households in Mbabane and Manzini had been increasing at average rates of 300 per year, respectively, quite steadily for half a decade before combined efforts of the private sector, the government worker pool housing program, and other housing organizations such as the Industrial Housing Company (Pty) Ltd., the National Housing Corporation and the Ministry of Local Administration Low Income Housing unit began to

1. Calculated from population increase and average household sizes prevailing in 1976.

raise annual production levels to anything approaching the annual need. (See Tables V-1 and V-2).

Informal Sector Bridges the Gap. Meanwhile the new families who could not be accommodated in these new units or in others already existing, found sites for themselves on Swazi Nation land, temporary occupancy Government land or unlawfully occupied squatter areas and provided shelter informally for themselves.

The informal, low-income settlements of shelters built of mud, stones and poles represent the backlog of need unmet by the formal sector of Mbabane and Manzini, and indeed, virtually every other urbanized community in Swaziland. A measure of the prevalence of urban squatter conditions is depicted in Tables V-3, V-4 and V-5. (Data for individual towns are in Table A-35.)

Swaziland had, at the time of the 1976 Census, 14,600 urban homesteads (or household units) built of non-durable materials wholly or partially. Of this number 10,450 or 72 per cent were in the Core Region, about equally distributed between the Hhohho portion and the Manzini portion.

This type of structure is quite typical for Swaziland. Indeed, self-built homesteads in urban areas comprise but 20 per cent of the total for this type of dwelling across the whole of Swaziland. Over and above the basic need to upgrade housing conditions throughout the country, urban self-built housing presents special problems more serious than simple numbers alone reveal. The densities at which these dwellings are built in urban areas create particular health hazards since they characteristically lack sanitary facilities for disposal of human wastes. The problems are compounded by accumulation of other wastes amidst the confined living area. Footpaths are dangerous, uneven and steep, winding circuitously among the houses set helter-skelter.

TABLE V-1. ANNUAL INCREASE IN URBAN HOUSEHOLDS, 1966-76

ILLUSTRATIVE EXAMPLES

<u>URBANIZED AREA</u>	<u>NUMBER OF NEW HOUSEHOLDS PER YEAR 1966-1976**</u>
Mbabane Area	295
Manzini-Kwaluṣeni-Matsapa	300
Pigg's Peak Area	160
Hlatikulu	50
Nhlangano	120
Stegi	125
Big Bend Area	475
Mhlume Area	410
Tshaneni Area	415

**Calculation based on the average urban household size prevailing in 1976: 4.2. Average rural household size was 6.7, average for urban and rural combined, 5.7. These figures differ somewhat from household sizes reported by the Census due to definition of urban area here which includes both a town or village and the surrounding area of concentrated settlement. These represent an implied rate of increase in numbers of dwelling units based on need rather than an actual count. Housing data for 1966 comparable with the 1976 Census tallies are not available. Thus, the number of units actually built during the 1966-76 decade is not known precisely. The relative proportions of informal and formal sector production are not known either.

TABLE V-2. ESTIMATE OF FORMAL HOUSING CONSTRUCTION
ACTIVITY MBABANE AND MANZINI, 1971-78

<u>DEVELOPER</u>	<u>ANNUAL AVERAGE PRODUCTION</u> <u>(NO. OF UNITS) DURING</u> <u>PERIOD OF OPERATION</u>		
	<u>PERIOD</u> <u>OF OPERATION</u>	<u>MBABANE</u>	<u>MANZINI-</u> <u>MATSAPA</u>
Private Sector* (Including Housing for company and parastatal employees)	1974-1978	120	50
Public Works (Government Pool Housing)	1971-1978	80	56
Industrial Housing Company (Pty) Ltd.	1973-1978	48	34
Ministry of Local Administration-Low Income Housing Unit	1975-1978	35	
National Housing Corporation	1974-1976		75
Peak Year Production (1975-76).		283	215.

*Estimates based on review of building permit applications and final inspection reports for the two towns.

FIGURE 4
 SWAZILAND · POPULATION AND LAND TENURE 1976

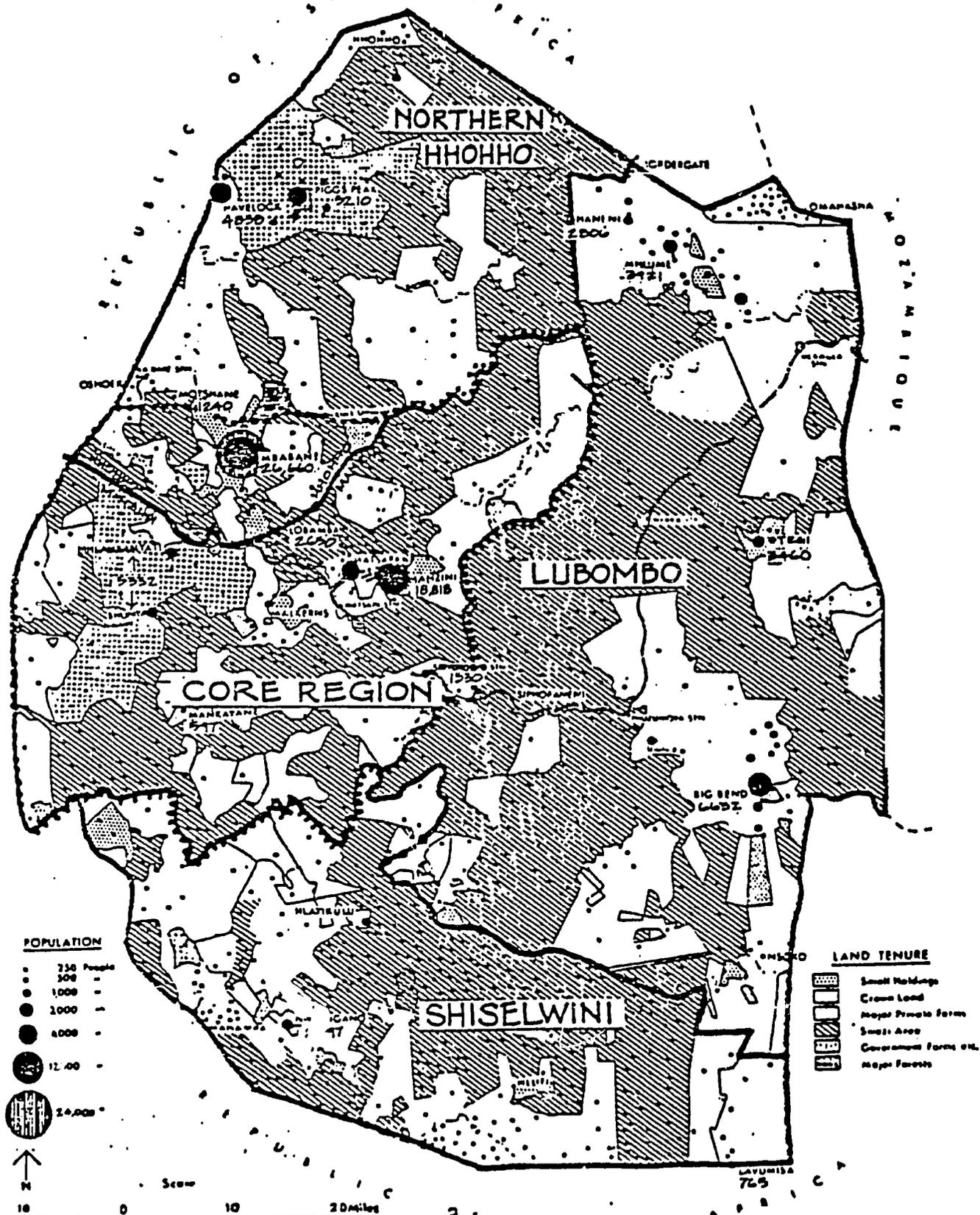


Table V-3

CONDITION OF HOMESTEADS, 1976:
DURABILITY OF CONSTRUCTION MATERIAL*

	Durable**		Partially Durable		Non - Durable		TOTAL
	No. of Home-steads	% of Nation Total	No. of Home-steads	% of Nation Total	No. of Home-steads	% of Nation Total	
Core Region	8,250	44.0	10,900	32.6	12,900	37.2	32,050
<u>Urban:</u>							
Hhohho	3,000	16.0	1,050	3.1	4,050	11.7	8,100
Manzini.....	3,600	19.2	1,750	5.2	3,600	10.4	8,950
<u>Rural:</u>	1,650	8.8	8,100	24.2	5,250	15.1	15,000
Northern Khohho Dist.	1,950	10.4	6,250	18.7	8,900	25.7	17,100
<u>Urban:</u>	500	2.7	1,300	3.9	650	1.9	2,450
<u>Rural:</u>	1,450	7.7	4,950	14.8	8,250	23.8	14,650
Shiselweni District...	2,000	10.7	8,900	26.6	6,850	19.8	17,750
<u>Urban:</u>	550	2.9	100	.3	200	.6	850
<u>Rural:</u>	1,450	7.7	8,800	26.3	6,650	19.2	16,900
Lubombo District...	6,500	34.7	7,400	22.2	6,000	17.3	19,950
<u>Urban:</u>	5,400	28.8	400	1.1	1,550	4.5	7,350
<u>Rural:</u>	1,100	5.9	7,050	21.1	4,450	12.8	12,600
SWAZILAND TOTAL.....	18,750	100.0	33,450	100.0	34,650	100.0	86,850
<u>Urban:</u>	13,100	69.9	4,550	13.6	10,050	29.0	27,700
<u>Rural:</u>	5,650	30.1	28,900	86.4	24,600	71.0	59,150

Numbers do not add in all cases due to rounding. See Appendix Table C for detail breakdown.

Durable corresponds to the 1976 Census designation "permanent" and it refers to wall construction in cement block, stone or stabilized brick. Partially durable corresponds to "mixed" in the census and means a portion of a structure or at least one structure in a group that constitute a homestead (family compound) is built of durable materials. Non-durable corresponds with "temporary" and refers to buildings of unstabilized mud, poles and unmortared stone.

Table V-4

CONDITION OF HOMESTEADS, 1976: SOURCE OF WATER

	TAP IN HOUSE		TAP OR STANDPIPE OUTSIDE HOUSE		OTHER		TOTAL	
	No. of Home- steads		No. of Home- steads		No. of Home- steads		No. of Home- steads	100%
ere Region	6,400	20.0	7,750	24.2	17,900	55.8	32,050	
Urban:								
Makhohho	2,600	31.9	3,400	41.7	2,150	26.4	8,100	
Mankzini.....	3,150	35.4	3,500	39.3	2,250	25.3	8,900	
Rural:	700	4.6	900	6.0	13,500	89.4	15,000	
Northern Makhohho.	1,500	8.8	2,750	16.1	12,850	75.1	17,100	100%
Urban:	850	34.7	1,400	57.1	200	8.2	2,450	
Rural:	650	4.4	1,350	9.2	12,650	86.3	14,650	
Mhishelweni District.	650	3.7	1,350	7.6	15,750	88.7	17,750	100%
Urban:	450	52.9	350	41.2	50	5.9	850	
Rural:	200	1.1	1,000	5.9	15,700	92.9	16,900	
Mabombo District.	3,250	16.3	5,350	26.8	11,350	56.9	19,950	100%
Urban:	3,000	40.8	3,850	52.4	500	6.8	7,350	
Rural:	250	2.0	1,500	11.9	10,850	86.1	12,600	
SWAZILAND	11,800	13.6	17,250	19.9	57,800	66.5	86,850	100%
Urban:	10,000	36.1	12,550	45.3	5,150	18.6	27,700	
Rural:	1,750	3.0	4,700	7.9	52,650	89.1	59,150	

Numbers do not always add due to rounding.

Table V-5

CONDITION OF HOMESTEADS, 1976: SANITARY FACILITIES

	WATER CLOSET*		PIT LATRINE		OTHER		TOTAL	
	No. of Home-steads	%	No. of Home-steads	%	No. of Home-steads	%	No. of Home-steads	100%
Core Region	8 150	25.4	8,500	26.5	15,450	48.1	32,050	
<u>Urban:</u>								
Hhohho.....	3,000	37.0	3,650	45.1	1,450	17.9	8,100	
Manzini.....	4,200	47.2	2,750	30.9	1,950	21.9	8,900	
<u>Rural:</u>	900	6.0	2,050	13.7	12,050	80.3	15,000	
Northern Hhohho.	2,600	15.2	2,650	15.5	11,800	69.2	17,100	
<u>Urban:</u>	1,800	73.5	450	18.4	200	8.1	2,450	
<u>Rural:</u>	850	5.8	2,200	15.0	11,600	79.2	14,650	
Shiselweni District.	700	3.9	2,250	12.7	14,800	83.4	17,750	
<u>Urban:</u>	500	58.8	250	29.4	100	11.8	850	
<u>Rural:</u>	200	1.2	2,000	11.8	14,700	87.0	16,900	
Lubombo District.	5,950	29.8	2,600	13.0	11,400	57.2	19,950	
<u>Urban:</u>	5,100	69.4	1,500	20.4	750	10.2	7,350	
<u>Rural:</u>	850	6.7	1,100	8.7	10,650	84.5	12,600	
SWAZILAND	17,400	20.0	16,000	18.4	53,450	61.5	86,850	
<u>Urban:</u>	14,600	52.7	8,600	31.0	4,500	16.2	27,700	
<u>Rural:</u>	2,800	4.7	7,350	12.4	48,950	82.8	59,150	

Numbers do not always add due to rounding

These figures should be used only with great caution because census tabulations indicate, among other inconsistencies, more homesteads with "water closets" than there are homesteads with indoor sources of water.

Most serious, however, is that 19 percent of Swaziland's urban households are without such sources of safe drinking water. This situation continues in spite of a concerted effort by government to provide treated water via standpipes serving several dwelling units or taps within individual homes. Informal settlement is spreading into new areas faster than the water supply is being extended.

The drinking water problem is even more severe in Swaziland's rural areas, where 89 percent of the households lack a source of treated water supply.

New Urban Households on the Way. Projections of Swaziland's population and its geographical distribution are shown in Table V-6. If the overall growth rate observed in the 1966-76 decade (28%) continues, Swaziland will approach the one million mark at the turn of the century.

By then 40 percent of the nation's population will be living in urban areas. National average household size will be 5.3 (down from today's level of 5.7) because the smaller urban households will represent a larger share of the total than they do at present.

The Core Region will still be the most heavily populated, but-- assuming efforts to maintain a dispersed pattern of growth are successful-- will still have less than half the population.

Urban households will increase by an average of 2,200 per year through 1988 and over 3,900 per year the following decade. A nual need for sheltering new urban families in the Core Region alone will amount to 1,680 over the next ten years and 3 140 units in the ten years following.

Table V-6

Distribution of Population and Households 1976, 1978^a and Projected 1978, 1988, 1998

<u>Core Region^b</u> (Manzini District plus Mbabane Expanded Area, Lobamba, and Zzulvini)	<u>1976</u>			<u>1978</u>			<u>1988</u>			<u>1998</u>		
	<u>Urban^c</u>	<u>Rural^d</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>	<u>Urban</u>	<u>Rural</u>	<u>Total</u>
Population	71,770	101,040	172,810	81,590	105,330	186,920	151,880	125,650	277,530	283,870	150,190	434,060
Households ^e	17,033	15,024	32,057	19,430	15,720	35,150	36,160	18,750	54,910	67,590	22,420	90,010
Persons/Household	4.2	6.7	5.4									
<u>Northern Hhohho District</u>												
Population	11,290	88,930	100,220	11,660	92,850	104,510	14,520	111,380	125,900	19,300	133,610	152,910
Households	2,461	14,632	17,093	2,530	15,220	17,750	3,160	18,260	21,420	4,200	21,900	26,100
Persons/Household	4.6	6.1	5.9									
<u>Shiselvini District</u>												
Population	4,045	113,125	117,170	4,270	117,460	121,730	6,960	140,400	147,360	9,760	167,820	177,580
Households	845	16,899	17,753	910	17,530	18,440	1,480	20,960	22,440	2,080	25,050	27,130
Persons/Household	4.7	6.7	6.6									
<u>Luboebo District</u>												
Population	27,740	76,590	104,330	30,270	79,380	109,650	45,440	94,880	140,320	69,030	113,410	182,440
Households	7,363	12,581	19,944	7,970	13,010	20,980	11,960	15,550	27,510	18,170	18,590	36,760
Persons/Household	3.8	6.1	5.2									
<u>Swaziland Total</u>												
Population	114,845	379,685	494,530	127,790	395,020	522,810	218,800	472,310	691,110	381,960	565,030	946,990
Households	27,711	59,136	86,847	30,830	61,520	92,320	52,760	73,520	126,280	92,040	87,960	180,000
Persons/Household	4.1	6.4	5.7			5.7			5.5	4.1	6.4	5.3

FOOTNOTES TO TABLE ON DISTRIBUTION OF POPULATION AND HOUSEHOLDS (V-6)

Population estimates for 1978 are based on projections for individual communities and the residual rural population for each district. Assumptions applied in the community projections are explained in Appendix Table A.

"Core Region" encompasses the Manzini District plus the following portions of Hhohho District: Mbabane Expanded Area, Lobamba and Ezulwini.

"Urban" includes the communities listed below. The 1966 and 1976 Census tallies show urban population of 50,800 and 80,600 respectively. They do not include as urban the squatter settlements on the outskirts of Mbabane, the communities of Malkerns, Mankayana, Lobamba, Ezulwini, Sidvokodvo, Motshane or the concentrations of population settled around Pigg's Peak, Stegi, Big Bend or Mhlume. Because infrastructure investments and settlement in these areas may be the basis for future growth, depending on employment policy and opportunities, we include them in this analysis.

Core Region

Mbabane Expanded Area (Enum. Dist.'s 5001-31, 1528)	
Manzini Expanded Area	(6001-23)
Bhunya-Mhlambanyati	(2503,2553)
Malkerns	(2301,2310)
Mankayana	(2527)
Lobamba	(1537)
Ezulwini	(1531,1538)
Sidvokodvo	(2341)

Balance of Hhohho District

Motshane-Ngwenya	(1539,1514)
Pigg's Peak Expanded Area	(1218-19)
Havelock	(1220)

Shiselweni District

Hlatikulu	(3242)
Nhlangano	(3347)
Layumisa	(3536)

Lubombo District

Stegi Expanded Area	(4322,4324)
Big Bend Expanded Area	(4407-8,4413,4420,4423, 4440-2,4340)
Mhlume Expanded Area	(4201,4204-7,4215,4249)
Tshaneni	(4202-3)

"Rural" includes the balance of population in each district.

Numbers of households are a composite of 1976 Census count of homesteads and estimates for three of the individual communities. Details are shown in Appendix Table B.

Household estimates for 1978, 1988 and 1998 are based on household sizes prevailing in 1976. Numbers may not add due to rounding.

Reduction in average household size for Swaziland as a whole occurs over time because the smaller urban household units are projected growing at a faster rate than the rural households. Consequently they constitute an increasing proportion of the total.

The distribution of projected household growth by individual urban areas is presented in Table A-36. The rate of flow to the Mbabane and Manzini areas is seen to be double that of the past decade.

Recapitulation of Shelter Needs. Urban shelter needs over the next five years may be divided into two component parts: needs of people who have already settled in and around the towns, and needs of the families yet to come. Census data on living conditions set the scale of the problems of the first group:

- * 5,150 urban homesteads without a source of treated drinking water
- * 4,500 urban homesteads without toilet or sanitary pit latrine
- * 14,600 urban homesteads in residential structures of nondurable or partially durable materials (which is only partially an indication of inability to afford lasting materials and much more significantly an indication of inability to secure tenure on the land so as to build a mortgageable house.)

The three types of problem generally occur in combination, but there are almost 10,000 of these urban dwellings where water and sanitation problems are not a critical health hazard. For the families in these households the crucial need is to secure tenure on a piece of land so they have the basis for improving the quality of their housing over time.

To the foregoing measures of urban need must be added the needs of new households in the urban areas:

* 2,200 urban families per year (700 per year in the Mbabane and 600 in the Manzini urbanized areas)

*11,000 over the five years 1978-83 who will need water, sanitation, land tenure and housing

Rural needs force a somewhat different set of priorities.

There are:

*52,600 rural families lacking a source of treated drinking water

*49,000 rural homesteads without sanitary facility for human waste

*45,000 rural homesteads where nondurability of building materials is a problem at least for some of the structures

* 1,200 new rural homesteads forming each year or

* 6,000 new homesteads for which water supply will be the first order of need, 1978-83.

To these figures, both urban and rural, must be added the needs for shelter and relocation of any families displaced by urban redevelopment, public works projects or rural development area resettlement programs.

B. Household Income and Housing Affordability

There are no well developed data on household income in Swaziland, but because of their importance to this analysis, estimates of average and median income and income distribution have been made based on a variety of sources. This analysis required considerable judgment by the research team. Therefore, the tables should be used as planning estimates, not as actual data. They should be revised when better survey data becomes available.²

Average monthly income for urban families is estimated to be E190 (\$218.00) per household in 1978. As estimated 47 percent of urban households cannot afford to live in shelter produced by the formal sector and therefore are most likely to be living under squatter conditions. Their incomes average about E95 per month.

High, medium and low income ranges are roughly defined on the basis of housing affordability. Low income families are those with 1978 monthly cash incomes in the E135-160 range. That is the level generally required to afford the one-bedroom prototype house of the Housing Unit at 1978 prices and market terms if monthly payments are held at 25% of monthly income. (This assumes unsubsidized units replicated in a new self-help project with costs for mortgage and homeowners' insurance folded into the mortgage total as in the Msunduza project.) To illustrate the relationship of this breakpoint for housing affordability to occupation and earnings scales, families at the top of this E160 group might include those headed by private sector male clerical workers or public sector male skilled workers. (See Table A-38.)

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2. The MLA Housing Unit has commissioned a study of housing quality and family incomes in the poorer sections of Mbabane and Manzini. Data forthcoming from this survey will be more definitive.

The breakpoint between middle and high income families occurs at E350 per month. This would place in the high income category most male public and private sector administrative and managerial and male private sector professional and technical occupations. Some male private sector skilled workers might be included as well. Civil service grades 11 and up would be high income.

Based on these definitions a distribution of urban income levels was created. It is presented in summary below.

TABLE V-7. SUMMARY OF INCOME DISTRIBUTION ESTIMATES

	<u>Urban Non-Squatter Households</u>	<u>Urban Squatter Households</u>	<u>Total Urban Households</u>
	(53%)	(47%)	(100%)
High Income (E 350+)	24%		13%
Middle Income (E 160-350)	55%	10%	34%
Low Income (E160 and under)	<u>21%</u>	<u>90%</u>	<u>53%</u>
Total	100%	100%	100%
Mean (E/month)	E 280	E 95	E 190
Median (E/month)	230	90	150

Note: Authoritative information on incomes is not available for any year since 1976. Economic Planning Office suggests in the Draft Third Plan that 1976-78 wage gains have not kept pace with rises in the preceding years (14% in 1975 and 24% in 1976), that the increases have been considerably less in the public sector than in the private and that cost of living has been catching up with the increases. In order to test the effect on housing affordability, alternative assumptions on 1976-78 household income growth are shown below. For the purpose of creating the income distribution an annual growth rate of 12% for those years was assumed.

Urban Household Category	1976 Mean Income Per Month	1978 Mean Income if 1976-78 Annual Increase is		
		8%	10%	12%
Non-Squatter	E223	E260	E270	E280
Squatter	E 76	E 89	E 92	E 95
All Categories	E152	E177	E184	E190

Housing prototypes have been defined on the basis of existing models, standards, and costs. A contractor-built one bedroom house with sanitary core, kitchen, and living room with 37 M² of gross building area at density 12.8 per acre can be built for E4,596 in 1978. If available, and if financed at market terms (SDSB) this unit would require E460 down and E41 monthly (plus utilities) and would be affordable by an estimated 65 percent of urban households (assuming 30 percent of total household income went for mortgage payments at 11 percent interest for 25 years). Table V-8 presents estimates on key data for the "minimal one bedroom house", two levels of standards for sites and services, and squatter upgrading.

Table V-8 distributes 1978 households (with particular focus on low income households) across the prototypes in accordance with shelter affordability on market terms. Although this establishes a context for program planning, it does not deal with policy decisions or recommendations about the rate at which the current housing situation should be improved.

Table V-8

ESTIMATED HOUSING NEED AND AFFORDABILITY^a - 1978

(Based on planning assumptions, not empirical data. Footnotes appear on following page.)

	<u>Swaziland Urban Families</u>		<u>Core Region Urban Families</u>		<u>Swaziland Urban Families in Informal Sector Housing</u>		<u>Core Region Urban Families in Informal Sector Housing</u>	
	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Estimated Number</u>	<u>%</u>	<u>Estimated Number</u>	<u>%</u>
Total Families	30,830	100%	19,430	100%	14,500	100%	9,200	100%
<u>Income Distribution (1)</u>								
High Income (E 350+)	4,000	13%	2,530	13%	—	—	—	—
Medium Income (E 160-350)	10,480	34%	6,600	34%	1,500	10%	900	10%
Low Income (under E 160)	16,350	53%	10,300	53%	13,000	90%	8,300	90%
<u>Shelter Affordability by Low Income Families (2)</u>								
Total Low Income Families	16,350	100%	10,300	100%	13,000	100%	8,300	100%
Can Afford One Bedroom House ^b (E 4140) at 25% of Income (E 135-160 monthly income)	3,400	21%	2,140	21%	2,600	12%	1,010	12%
Can Afford Full Sites and Services ^c (E 3000) at 25% of Income (E 110-135 monthly income)	3,420	21%	2,160	21%	2,250	17%	1,430	17%
Can Afford Basic Sites and Services ^d (E 1500) at 20% of Income (E 75- 100 monthly income)	4,390	27%	2,760	27%	4,000	31%	2,560	31%
Can Afford Squatter Upgrading ^e (E 400) at 10% of Income (E 45-75 monthly income)	3,100	19%	1,950	19%	3,100	24%	1,990	24%
Cannot Afford Economic Housing (less than E 45 monthly)	2,040	12%	1,290	12%	2,050	16%	1,310	16%

Housing Prototypes - Illustrative Standards and Costs

- a. Market Level Financing Terms at Swaziland Development and Savings Bank. 10% down, 11% interest, 25 year term for repayment (not past 25th birthday) 11.8% constant payment per year, maximum 30% of income for debt service.
- b. One Bedroom Expandable Unit. One bedroom plus sanitary core, kitchen and living room with 37 M² gross building area at 12.8 per acre. Aided self-help unit. Mortgage includes insurance costs.
 Total Cost = E 4140
 Down Payment 414 (10%)
 Mortgage E 3726 x 11.8%/year = E 37/month debt service
 25% of income requires E 148 per month of household income
 30% of income requires E 123 per month of household income.
- c. Fully Served Sites and Services. Individual water tap for each dwelling unit, sewerage, sanitary core, 330 M² plots (6 per acre), no electricity.
 Total Cost = E 3000 including land, infrastructure, and materials for house
 Down Payment 300 (10%)
 Financing E 2700 x 12.4%/year (20 year term) = E 28/month debt service
 25% of income requires E 110 per month of household income.
- d. Basic Sites and Services. Water standpipe for each 4 dwelling units, individual pit latrine, lots @ 12/acre.
 Total Cost = E 1,500 including land, infrastructure, and materials for home
 Down Payment 150 (10%)
 Financing E 1,350 x 13.6%/year (15 year term) = E 15/month debt service
 20% of income requires E 75 per month of household income.
 25% of income would require E 60 per month of household income.
- Squatter Upgrading. Pit latrines, footpaths, etc. as called for in individual projects.
 Total Cost = E 400 including infrastructure only
 Financing E 400 x 13.6%/year (15 year term) = E 4.50/month debt service
 10% of income requires E 45 per month of household income
 25% of income would require E 18 per month of household income.

C. Motivation for Home Ownership

Swazi families who value home ownership are readily willing to spend 25 to 30 percent or more of their income on debt service for their homes. However, the history of heavily subsidized rental housing provided by government and by companies has made home ownership relatively less attractive. A few families who could afford to own their own homes on very favorable financing terms (9 percent mortgages for government employees) have taken advantage of these terms to build houses and rent them out rather than give up their government-subsidized rental units. This abuse, the carrying of two housing subsidies in one family, is being brought under control with increased scrutiny by government authorities.

Families selected for the first stage of the aided self-help project had incomes ranging from E40-E150 monthly³, clearly within the category of low income by the definitions used in this report. This was possible due to subsidies on both costs and financing. Approximately 70 percent of the cost of completed units was passed on to the participant purchasing families. The remaining 30 percent was a subsidy by the government and U.N. grant assistance covering the infrastructure portion and costs of staff.⁴ Financing was arranged through SDSB at 7 percent interest for 20 years with no down payment on the E200 plot. Current market rates are 11 percent interest for 25 years and 10 percent down payment is required.

-
3. Source of this information is the Housing Unit of MLA.
 4. A valid argument could be made that staff costs are part of the government's Housing Unit recurrent budget and therefore should not be counted as project overhead. From another viewpoint, however, the need to escalate the scale of shelter programs substantially implies a need for expanded Housing Unit staff resources. In the face of tight government controls over growth in the recurrent budget, there are advantages to an accounting procedure which classifies staff costs as project overhead. In this way they become part of the dwelling unit cost included in the mortgage and recoverable from the ultimate home occupants.

Squatter families typically "own" their own units, though they lack assured tenure to the land. Squatter units typically cost about E250: E115 for materials (roof, window, door and two bags concrete for the floor) plus E135 for the value of their labor in constructing it (500 hours @ E.27 per hour).

About 20 percent of squatter units are rented, typically at E5 to E12 per month. This would be 10-20 percent of family income in squatter areas of Mbabane and about 6-13 percent of family income in Manzini.

Water has been provided at standpipe locations at about one for every ten to twenty families at certain squatter areas. There is no charge to the residents for either the initial cost or the continuing water usage, over and above the E2 annual fee for temporary occupancy of government-owned land, if applicable.

Mobilizing Personal Income for a Shelter Program. Household income of urban families is one resource in Swaziland that appears not to have been tapped to its potential in providing shelter. Some families are capable of paying considerably more for their accommodations than they are paying now, if 25 percent of income is the criterion.

The foregoing affordability analysis "matches up" portions of the spectrum of urban household with packages of shelter services, i.e. the prototype accommodations each income group can afford without severe strain. Actually mobilizing resources of this sort, however, requires that there be programs which produce the facilities, and that mechanisms be created whereby individual families can assume the responsibility for paying off the costs of the shelter they occupy. The 1977 rural-urban migration study in the low income settlements of Mbabane and Manzini indicated that quite a number of families maintain savings accounts in a bank.

Some claim to be saving to purchase cattle. Others tell of housing aspirations. Yet shelter as an object of savings appears to be less competitive--not only because interest rates are relatively low (4 to 7 percent) and taxable--but also because shelter takes so very long to materialize.

D. Capital Requirements

If the 11,000 new households expected in Swaziland's urban areas over the next five years were to be provided shelter at standards related to their capacity to afford it so that no new squatting occurs, the capital requirement would be on the order of E20 million annually.⁵ This estimate does not make a distinction between what portion would be with or without a subsidy. Nor does it imply any assumptions about which institutions should be responsible for satisfying any portion of the need. Nor does it include any provision for slum clearance or otherwise upgrading shelter for households living in the urban areas now. The E20 million would be an initial capital outlay for housing, land and on-site infrastructure. It does not include major infrastructure such as trunk line sewers or major roads and it does not include community facilities such as schools, sports fields or parks.

Certainly, a substantial part of such an investment could be channeled in the form of loans which would be repaid, possibly into a revolving fund for shelter reinvestment.⁶

The figure is not meant to imply a particular program outline, but rather to establish the order of magnitude of foreseeable needs. It sets a context within which alternative program proposals may be debated and priorities set.

5. See Appendix A-44.

6. By contrast, it should be considered that the combined total of all outstanding bank loans for home mortgages today at the Development and Savings Bank and the Swaziland Building Society is E9.0 million.

Table A-39

ESTIMATED DISTRIBUTION OF INCOME FOR URBAN FAMILIES IN SWAZILAND
(1978 TERMS)

	<u>% Total Families</u>			<u>Distribution</u>			<u>Cumulative Distribution</u>		
	<u>Non Squatter</u>	<u>Squatter</u>	<u>Urban Total</u>	<u>Non Squatter</u>	<u>Squatter</u>	<u>Urban Total</u>	<u>Non Squatter</u>	<u>Squatter</u>	<u>Urban Total</u>
<u>High Income</u>									
E350+	13.0%	--	13.0%	24.5%	--	13.0%	24.5%	--	13.0%
<u>Middle Income</u>									
E160-350	29.0%	5.0%	34.0%	54.7%	10.6%	34.0%	79.2%	10.6%	47.0%
<u>Low Income</u>									
E135-160	5.9%	5.1%	11.0%	11.1%	10.9%	11.0%	90.3%	21.5%	58.0%
E110-135	3.9%	7.2%	11.1%	7.4%	15.4%	11.1%	97.7%	36.9%	69.1%
E75-110	1.2%	13.0%	14.2%	2.3%	27.6%	14.2%	100.0%	64.5%	83.3%
E60-75	--	5.3%	5.3%	--	11.3%	5.3%	--	75.8%	88.6%
E45-60	--	4.8%	4.8%	--	10.1%	4.8%	--	85.9%	93.4%
E18-45	--	5.5%	5.5%	--	11.8%	5.5%	--	97.7%	98.9%
E0-18	--	1.1%	1.1%	--	2.3%	1.1%	--	100.0%	100.0%
Subtotal Low Income	11.0%	42.0%	53.0%	20.8%	89.4%	53.0%			
Total	53.0%	47.0%	100.0%	100.0%	100.0%	100.0%			

Note: These estimates are based on Employment and Wages - 1976, the Establishments Register - 77/78, and the 1977 urban-rural migration survey. As these sources are based on different segments of the labor force, and no source of household income data covers all population segments, considerable judgement has been exercised by the researchers in interpolating these estimates from the data. These estimates should be replaced as soon as better data becomes available. Also, it should be remembered that these income estimates exclude expatriate income earned from abroad.

Table A-40

Derivation of the Household Income Distribution of Swaziland
1976 and 1978

This table is derived primarily from information on wages manipulated through the methodology described on the next page. There probably is a skewing of this data downward from the nature of the source data. For example, expatriates are included but that portion of expatriate income which comes from foreign donor sources is not included.

Avg. Monthly Cash Income		<u>Total</u> <u>Homesteads</u>	<u>Urban</u> <u>Homesteads</u>	<u>Rural</u> <u>Homesteads</u>
<u>1976</u>	<u>1978</u> (+ 12%/year)			
E540+	500+	1,000+	1,000+	
400	500	640	640	
350	440	700	700	
300	375	1,000	1,000	
250	310	1,300	1,300	
200	250	2,210	2,000	210
150	190	6,000	3,000	3,000
100	125	22,000	10,000	12,000
50	60	21,200	5,200	16,000
25	30	30,800	800	30,000
Total Homesteads		86,850	25,640	61,210
Total Monthly Cash Income (1976)		7,200,000	3,900,000	2,200,000

Notes:

- 1E = \$1.15
2. Wages increased by 12 percent in 1975 and 23 percent in 1976, according to the Central Statistical Office', Employment and Wages, 1976. Projection to 1978 assumes the lower rate of 12 percent which is about equal to increases in the cost of living.

Continued on next page.

Footnotes to Table A-40, Continued

3. In the absence of actual data assumptions were made concerning general indicators of the distribution of homestead income. The approach outlined below should be validated or replaced by empirical data as soon as survey reports become available:
 - a. Average monthly wages for non-agricultural male wage earners by skill level for both public and private sectors were taken from the Central Statistical Office', Employment and Wages, 1976. This represented a distribution of male wage earners into twelve income levels ranging from E51/month for private sector, unskilled workers to E581/month for private sector professional and technical employees. These were assumed to be heads of homesteads. (See Table A-38.)
 - b. Male wages earned were increased by 25 percent to reflect additional homestead income produced by wage earning women (assumed to be wives). This was regarded as homestead income.
 - c. Homestead income was reduced by 15 percent to adjust for money sent to the rural homesteads.
 - d. A distribution curve of these twelve cells of assumed levels of homestead income was made, reasonable income intervals were marked off and the numbers of homesteads within them were counted.
 - e. Allocation of some of these wage earning homesteads was made to rural areas as guided by employment in forestry, mining, and quarrying.
 - f. Non-wage earning rural homesteads were distributed by income based on de Vletter, The Rural Homestead as an Economic Unit, July 1978, p. 23.

APPENDIX 46

RURAL-URBAN MIGRATION STUDY

In the summer of 1977, students at the University of Botswana and Swaziland* conducted a survey in a number of the low income, informal shelter settlements of Mbabane and Manzini. The questionnaire attached to this appendix was administered to approximately 300 respondents. They were distributed among the settlements as follows:

<u>Low Income (Migrant) Housing Area</u>	<u>No. of Survey Interviews</u>
<u>Mbabane and Vicinity</u>	<u>94</u>
Fonteyn	13
Mangwaneni Corporation	19
Msunduza	12
Mvakwelitshe	27
Sidwashini	4
	19
<u>Manzini and Vicinity</u>	<u>206</u>
Khoza's Area	94
Kwaluseni	9
Moneni	51
Zakhele	29
Kamanzana	3
Sitandeni	20

Students were instructed to interview at every third house (not a randomly selected sample) and to go on to the neighboring house if they found no one at home or a respondent unwilling to be interviewed.

The questionnaires were coded and tabulated for selected questions in July 1978 by the Rivkin Associates' team. After being called to remove obviously invalid or inconsistent questionnaires, there were approximately 285 questionnaires remaining in the sample. Not all questions were answered in each case so the sample size for individual questions varies. In the case of monthly income data reported in Figure 9, p.IV-16, for example, the weighted average figures for households reporting income from all sources (e.g. salaries of all household members, room rentals, informal sector enterprises, et al) was computed. Other information presented in the Figures 9-13 of Chapter IV was checked against enumeration district tallies from the 1976 Census (e.g. shelter occupancy) or the Rivkin team's observations from field visits and a limited number of interviews.

Under the supervision of Fion de Vletter.

The survey was designed with objectives other than strictly gaining data on which to base the planning of shelter. Therefore, much information that would be crucial to a housing program (e.g. current savings practices, expenditure patterns and the capacity of various income strata to save) is not systematically obtained. Nor is comparability with other available data easily established.

Income information for families who applied to participate in the Msunduzi aided self-help housing project shows a monthly average of E76 in 1978. The difference between this level and the E55 of the UBS survey could be attributable to sampling error, inflation between 1977 and 1978 and possibly even a bias because the lowest income families of Msunduzi would not be applying for the Housing Unit project. Even while this shelter sector study is being completed, a survey of housing quality and incomes in the low income areas of Mbabane and Manzini is in process for the Housing Unit. The new survey may be expected to reveal a more definitive picture. Thus, the Rivkin team has urged that income estimates in this shelter sector study be regarded as judgmental and indicative only.

For the purpose of designing a shelter program such as this study outlines in its recommendations, the Government of Swaziland will need proper survey data for the low income population of all the towns and significant settlements in urbanizing areas. It will be important to gain knowledge of the resources and income potential of the families who will be migrating to the urbanizing areas over the coming years as well as the families who have already arrived. An inventory of shelter conditions, costs, production levels, and availability in the smaller towns will also be necessary for the planning of appropriate program components.

Name of Interviewer _____ Date _____

Area of Interview _____ Household Number _____
(If possible)

Description of Premises

Sex of Respondent Male Female Position in Household _____

Background/Motivations/Achievements

- How old are you? _____
- What level of education have you attained? _____
- Where is your "home"? (i.e. place which could be considered a family base)
(Specify area by name, district and nearest town)

- 1a. When did you leave your home area? _____
- 1b. Why did you leave your home area?

Where did you go and what did you do from the time you left your home area to moving to this area? (Ask respondent to indicate all places lived in and all employment activities engaged in during that time)

What would you have done if you had remained in your home area?

What attracted you to come to this area?

What type of employment did you expect to obtain on moving to this area? (Ask respondent to indicate what he realistically expected to do as opposed to what he/she wanted to do)

What type of work have you done since arriving in this area? (Ask respondent to indicate all forms of income generating activities engaged in)

Are you satisfied with your present form of employment? _____

If YES: How long were you in this area before obtaining satisfactory work?

If NO: Why not?

Family Structure

- a. Who did you stay with when you first arrived in this area?

- b. How long did you stay with them? _____

- c. Did you stay in any other households before moving into this house? _____

If YES: Who did you stay with and for what periods of time?

7. Who lives in this household presently? (Ask respondent to specify relationship and age of each inhabitant including all non-family members)

8. Do you or any of your family own a rural homestead? (Explain)

If YES: Who lives in rural homestead? (Ask respondent to specify relationship and age of each inhabitant to the best of his/her knowledge).

9. How many people do you support with your income? (Explain)

Income Flows

10a. What types of activities/employment are you presently earning income from?

b. How much do you earn per month from these activities/employment? (approximation) (Break down by activity if possible)

Who else in your household earns income? (Specify who, what type of work and approximate monthly income)

Do you receive food or any goods from your rural homestead? _____

If YES: What types of food/goods and what quantities per month (approximately)?

Expenditure Patterns

What do you consider your main items of expenditure are? (list in order of importance if possible)

Do you send money or goods to your rural homestead? _____

If YES: Approximately what value, how often?

4 | Do you plan to buy cattle with your earnings? (Explain)

5. Do you save or plan to save any of your earnings in a bank or its equivalent? (Explain)

Housing

6a. Do you own or rent your house?

6b. Who owns the land that you live on?

6c. If respondent rents house/land ask: How much do you pay per month
for: i/ house

ii/ land

7. Do you rent out or sub-let any rooms in your house? _____

If YES: How much do you earn from rent per month?

8. What payments do you or did you make to: i/ municipality/govt.

(Explain in each case)

ii/ local chief

iii/ other (Explain)

9. Have you already or do you plan to spend much money on household improvements or expansion?

If YES: ask respondent to give details.

If NO: Why not?

2a. What do you feel are the main problems of housing in this area?

b. What problems do you believe require immediate attention?

Services

21. Have any members of this household fallen seriously ill or died?

2a. When ill what medical facilities would you use? (Tick appropriate category(ies) and ask respondent to elaborate if possible)

- Government Clinic
- Government Hospital
- Private Clinic
- Mission Clinic/Hospital
- Private Practitioner
- Swazi Traditional Doctor
- Other (Specify)

b. What do you feel are the main problems of the medical facilities provided for this area?

3a. How far away is your nearest suitable water supply?

b. How is it fetched?

- stream
- stand pipe

How are your wastes disposed of? (Ask respondent to indicate separately for human waste and rubbish)

How many members of this household go to school?

If there are any members of the household who are eligible to go to school but do not, why don't they?

Attitudes

Would you be willing to consider manual work in any of the following areas? (Ask respondent to explain why/why not for each case)

i/ South African mines (only if respondent is male)

ii/ Farming or forestry in South Africa

iii/ Manufacturing sector in South Africa

iv/ Mining in Swaziland

v/ Mining in Swaziland

SELECTION OF DESIGN STANDARDS AND AFFORDABILITY

Prepared by Robert Olsen

October, 1982

This material consists of two parts.

Part One is the discussion outline which will be followed during the presentation. This material will be illustrated by use of an HP 85 computer which will demonstrate the implications of different physical standards on costs and affordability issues.

Part Two is a narrative paper on the use of Design Standards and Costs For Residential Projects.

Participants are asked to read Part Two and be familiar with the outline of issues to be discussed as raised in Part One.

PART ONE

SELECTION OF DESIGN STANDARDS AND AFFORDABILITY

I. Introduction

The selection of standards for housing and upgrading projects can greatly effect total costs. When countries establish minimum standards by law, the effect on low-income target groups can be enormous.

This paper examines the selection of alternative standards as they affect costs and affordability of housing to low-income people.

- A. Most countries have legislation which establishes minimum legal standards for urbanization. If a subdivision or squatter settlement does not meet those standards, it is considered illegal.
 1. As such, its inhabitants may not be eligible for urban service benefits such as water supply, sewerage, and solid waste collection.
 2. Illegal status may even affect land tenure. Private ownership may not be protected by law, even in cases where occupants have purchased their plots.
 3. Minimum legal standards often reflect the values and urbanization standards of middle-class people rather than those which are actually affordable by most of the population. They are often imposed during colonial eras and have not been altered.
 4. The total cost of projects which must adhere to uniform legal standards often make them unaffordable to low income groups.
- B. Reasons for standards. Properly formulated standards can serve many important functions:
 1. Assure efficient use of urban lands. Uncontrolled urban sprawl creates problems - poor access to employment, high transportation costs, lack of services.
 2. Reduce cost of providing municipal services. Government resources are limited and must be used carefully.
 3. Assure adequate land for public services and open space.
 4. Assure public safety.
 5. Minimize damage from natural disasters.
 6. Protect the environment.

II. Types of Standards

A. Land Use Standards: determine how land surface is used - residential, plot size circulation, facilities minimum open space.

B. Infrastructure Standards

1. Basic objective - habitable and healthy neighborhood environments.
2. Many ways to meet desired requirements by defining water supply, sanitation, drainage, and circulation standards.

C. Construction standards

1. Determine types of material, size of rooms, ventilation, etc.
2. Important in zones subject to disasters.

III. Cost Considerations of Standards for New Projects

A. Each Minimum Standard has its Cost

1. When the costs of all the minimum standards are considered together, it is often impossible for the vast majority of urban populations to afford them.
2. Most urban residents have no alternative to illegal subdivisions.

B. Cost of Land Use Standards

1. Density is most important factor. The lower the density the higher the cost of a plot.
2. Examples of how standards effect costs. West Africa project.

Example I

Circulating Space

	Width of Primary Street-M	Width of Secondary Street-M	% Space for Cir- culation	Density Persons/ ha	Mthly. Payment CFA	% Increase
Proposition 1	16	10	27.1	155	12,512	
Proposition 2	28	16	41.9	115	15,589	23.8

Example 2

Plot Size

	Size M2	Density Persons/ha	Monthly Payment CFA	% Increase
Proposition 1	200	208	11,227	
Proposition 2	400	112	16,229	44.6
Proposition 3	600	80	20,649	83.9

C. Cost of Infrastructure Standards

1. Many ways to solve problems. The higher the standard, the higher the cost. Must look at recurring maintenance costs of systems.
2. Example - same West African project. Basic Standard (stand pipes, gravel streets, no street lights) - Monthly payment 7,843 CFA. Medium Standard (Individual connections for water, paving and street lights for primary streets) Monthly payment 11,647 CFA, 48.4% increase. See Annex I for more detail on cost standards.

D. Cost of Construction Standards

1. Often standards result in over design.
2. Expensive materials - sometimes exclude local or traditional materials.
3. Performance standards are most difficult to implement but provide flexibility.

E. Land Costs

1. Must consider site preparation costs as well as purchase price. A cheap initial site may cost high to develop.
2. Must consider recurring costs to residents such as transportation if site located far from center.

F. Affordability

1. PADCO/Bertaud Model developed to analyze project feasibility. Considers major variables and the trade-offs between them. Results from West Africa project illustrated graphically in Figure 1.
2. Curves at left for 3 infrastructure standards. Target population cannot afford highest standard (#3). Variety of options available with standards #2 and #1.

3. Affordability of project in Central America is illustrated in Figure 2. Plots developed to minimal standards at minimum land costs require \$100 monthly payment. 66% of population cannot afford a plot developed to these standards in the city.

IV. Cost Considerations of Standards for Upgrading Projects

A. Upgrading projects more difficult because there is less control

1. Urban fabric established and housing exists. Expensive and difficult to change existing land use patterns.
2. Only area of control is infrastructure standards. Usually difficult to integrate systems into existing urban fabric.
3. Cost recovery more difficult when plots not sold. Tax also difficult because of inefficient collection systems.
4. Set standards to meet basic improvement objectives but to keep costs as low as possible.

B. Land Use Standards

1. Density - check first. Usually high in spontaneous neighborhoods. May require some acquisition and clearance for circulation and community facilities. If density is low, identify unused land for public use or infill housing.
2. Do not impose new development standards on existing area. Keep clearance to minimum. Look at real needs and ability of residents and government to pay. Squatter upgrading illustrated in Table 3 has lower standards for public space and circulation than would normally be sought in new development.

C. Infrastructure Standards

1. Difficult to integrate new systems into existing urban structure. Use circulation spines and services.
2. Problem areas - sanitation and drainage sites are occupied by squatters because areas are not desirable to higher income groups.
3. Costs increase with higher standards similar to example for new development (III.C.2).

D. Affordability

1. Do not improve neighborhood beyond ability of area residents to support.
2. In some cases cost of upgrading will be so high that project is not feasible. Relocation may be the best solution.

V. Comparison of Standards

1. Examples from different parts of world. Look at land use standards, density and were available cost.
2. Middle eastern country. Three new town projects and a sites and service project are compared in Table 1. Projects 2 and 3 are for the same target population and on similar sites but because of different densities and infrastructure have a very different per capita cost. Only 0.1% of population could afford to pay full price of projects 1 and 2 while 70-75% could afford a plot in the sites and services project.
3. Central American country official subdivision standards are compared with an existing upgraded squatter settlement. (Table 2)

Even though a much higher percentage of land is used for housing in the squatter area, the densities are not too different because plots are larger in the squatter area. Note that government was willing to accept much lower standard for circulation and open space in squatter area.

4. Sites and service projects in West Africa. Table 3 shows land use from projects in two countries. These are USAID sponsored projects with target populations earning below the medium income. Densities are lower because of a preference for larger plots.
5. Sites and services project in Asia: Land use similar to other projects. (Table 4) Circulation is lower because width of streets no greater than 8m. Access to least expensive lots is by 3m wide footpath. Variety of plots designed for different incomes. Table 5 illustrates affordable solutions for different incomes.
6. Table 6 compares costs and infrastructure standards for two upgrading projects. Costs are considerably lower in the Asian country. Difference results in part from sanitation solutions. Individual privies and septic systems account for 6.2% of total costs of the Asian project while the sewerred septic systems are 39.7% of costs for the Africa project.

VI. Criteria For Evaluation

A. Principal areas of Influence

1. Cost implications

Land Use - Density

Infrastructure - design standards and level of service

Construction - materials and finishes

2. Functional implications

Public and personal safety - disaster preparedness

Environmental quality - health

B. Flexibility

1. Performance standards. Allow for innovative solutions and use of materials.
2. Avoid arbitrary or over restrictive regulations.
3. Different standards for different situations or objectives. Lower standards for upgrading projects.
4. Long-range view of low-income development. Experience indicates families will improve situation as they have resources if ownership is secure.

C. Periodic Review

1. The usefulness of any fixed minimum standard should be periodically reviewed, taking into account the issues raised in this chapter.
2. Particular attention should be given to the need for standards affordable by even the lowest income groups.

TABLE I

LAND USE - MIDDLE EASTERN COUNTRY

	Resi- dential	Service Open Space	Circu- lation	Gross Density Persons/ ha.	Per Capita Investment
New town 1	46.9%	22.1%	31.0%	76%	\$4743
New town 2	23.7%	39.0%	37.3%	145%	\$4120
New town 3	39.7%	47.9%	12.4%	812%	\$1047
Sites & Services	66.1%	7.4%	26.5%	594%	\$358

TABLE 2

LAND USE - CENTRAL AMERICAN COUNTRY

	Residential	Service & Open Space	Circulation	Gross Density Persons/ha
Official Standards	39.7%	27.8%	32.5%	384
Upgraded Squatter Settlement	78.0%	3.5%	18.5%	581

TABLE 3

LAND USE - WEST AFRICA SITES AND SERVICES PROJECTS

	Residential	Service & Open Space	Circulation	Gross Density Persons/ha
Country 1	60%	14%	26%	220
Country 2	56.9%	17.2%	25.9%	216

TABLE 4

LAND USE - ASIAN COUNTRY

	Service & Open Space	Circulation	Commerical Small Industry	Gross Density Persons/ha
Residential	16.8%	15.2%	3.1%	315
	64.9%			

TABLE 5

HOUSEHOLD AFFORDABILITY AND HOUSING STANDARDS - ASIAN COUNTRY

Percential Income Group	10	30	50	76	90
Monthly Income \$	40.32	75.81	94.35	146.77	217.61
Percent of Income Spent on Housing	15	15	15	15	15
Affordable Monthly Payment \$	6.05	11.37	14.17	22.02	32.64
Total Capital Resource \$	610	1,147	1,430	2,222	3,294
Plot Size - M ²	60	90	120	140	180
Core House	13	21	21	36	45
Neighborhood Density-person/ hectare	570	429	340	301	236

TABLE 6

UPGRADING STANDARDS AND COSTS

	African Country	Asian Country
Project Area-Hectores	186	244
Population	40,000	80,300
Estimated Costs \$	3,730,000	3,358,065
Costs/Capita \$	93.25	41.82
Costs/hectare \$	20,054	13,763
Primary Streets	Asphalt paving	-
Secondary Streets	Gravel (laterite)	Asphalt paving
Residential Sheets	Grading	Asphalt paving
Footpaths	Sand	Asphalt paving
Drainage	Combination concrete and graded ditch	Brick lined ditch
Water supply	Extend system of standpipes 1/100 plots	Extend system of standpipes 1/45 plots
Sanitation	Sewered septic systems Public toilets in	Individual Prures or septic Public toilets in
Electricity	Minor extension of street lights primary streets	*
Solid Wastes		System of hand carts Pick up by small trucks on secondary streets

* Electricity will be installed by the local utility. Costs will be recovered by means of user fees.

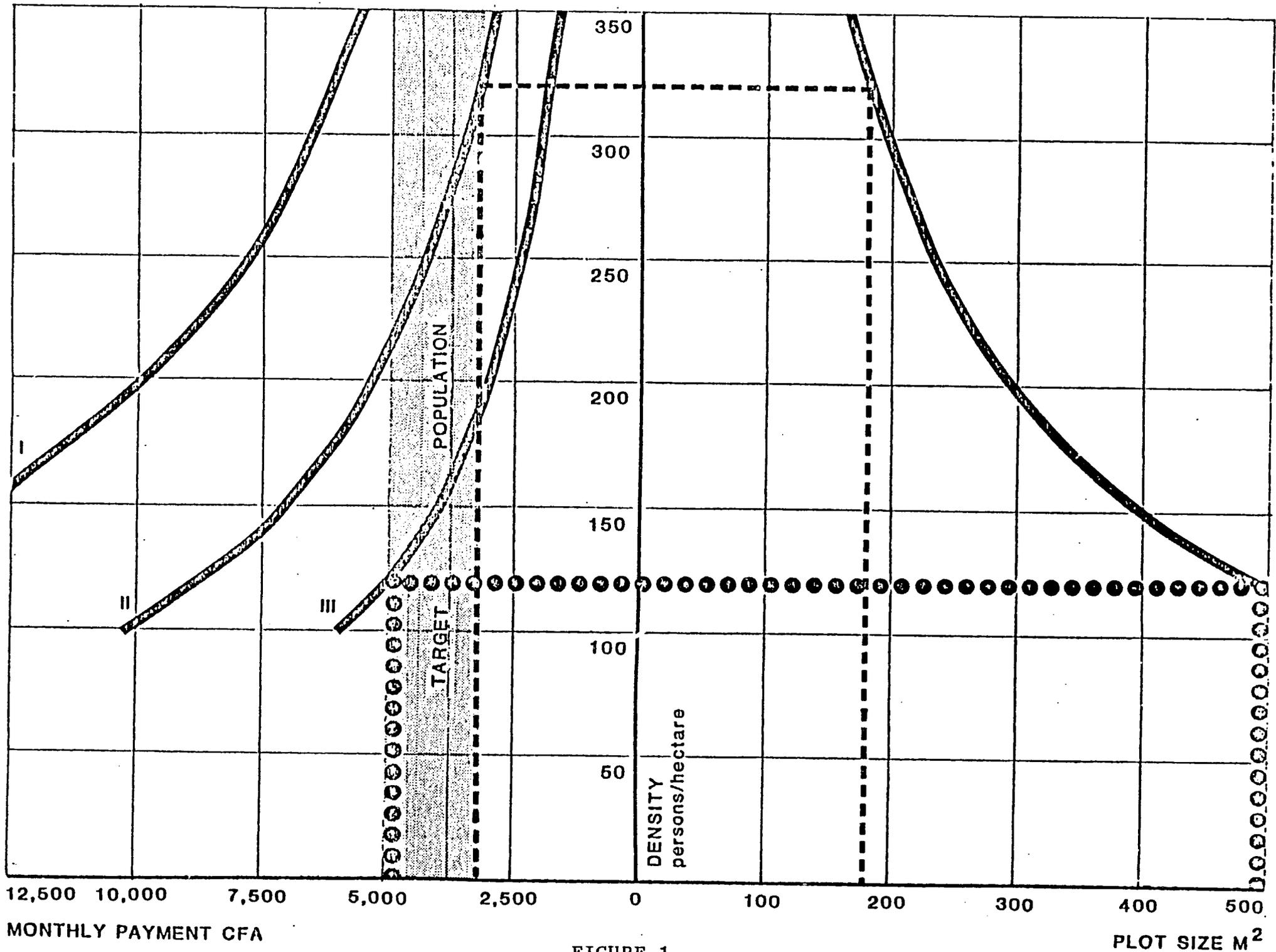


FIGURE 1

Affordable
land cost/m²

AFFORDABILITY OF
MINIMUM STANDARDS

No urban land
available below
this cost

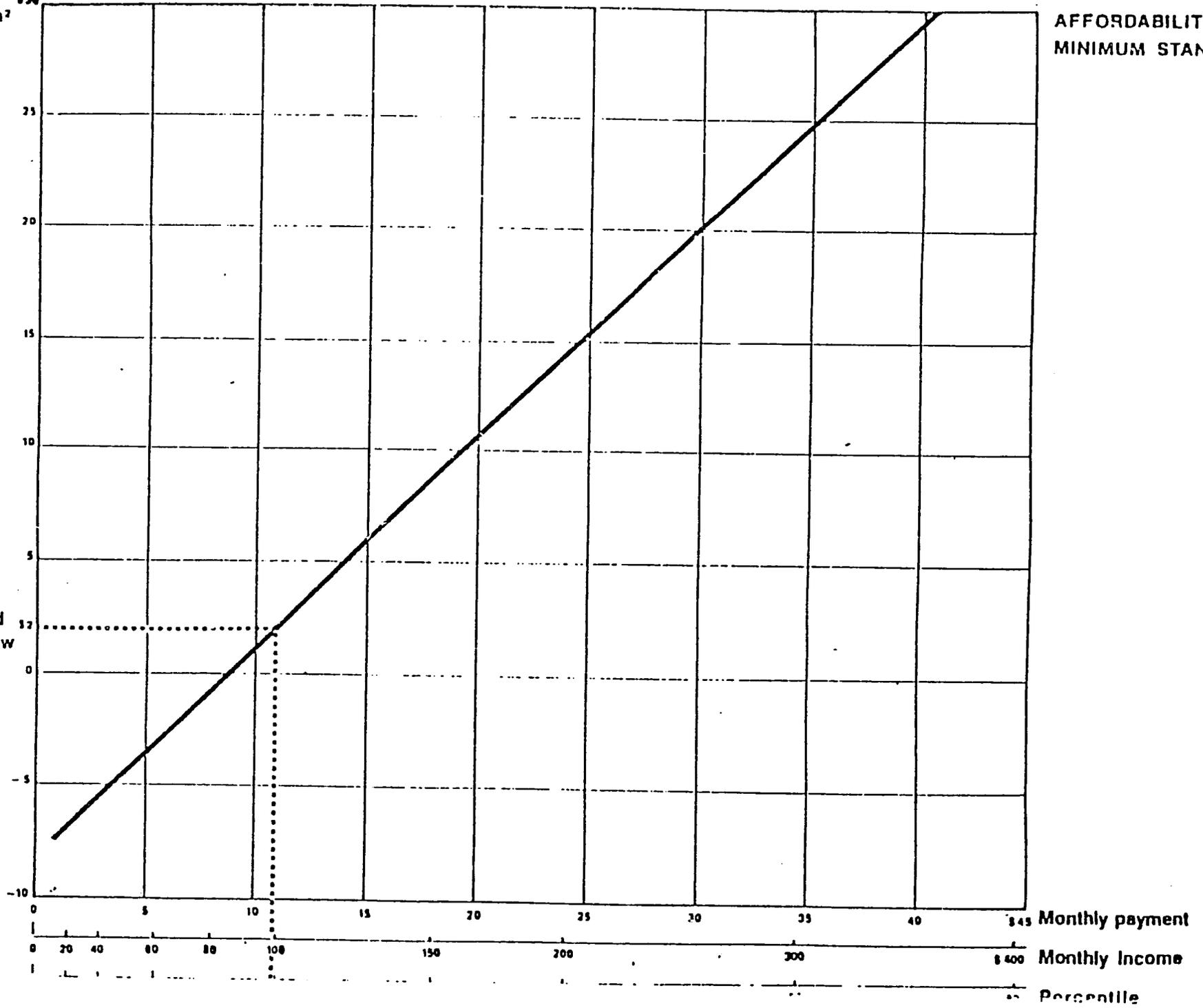


FIGURE 2

29-001P -- 60

PART TWO

DESIGN STANDARDS AND COSTS FOR RESIDENTIAL PROJECTS

In most countries of the world, the development of housing in urban areas is not keeping pace with the ever increasing demand. The greatest problems are being experienced in urbanizing areas of developing countries where these problems are most acute for the urban poor. While the demand for housing is increasing the financial capacity of governments to provide assistance for housing programs is decreasing. Therefore, the costs which can be borne by government agencies will be limited, making it difficult in most cases to provide even basic services such as schools, major roads and parks.

If the housing needs of urban families are to be satisfied, it will be necessary for project beneficiaries to support most of the costs of project development themselves. Thus projects must be designed that are appropriate and affordable by the target population. Since design standards determine to a large degree the costs of a project, it is imperative that planners understand the cost ramifications of design decisions and that appropriate standards be established to assure that shelter needs are satisfied.

This paper will look at the types of standards needed as well as the influence on costs of various standards. It is felt that standards in addition to assuring project feasibility are needed to:

1. Assure the efficient use of urban lands.

Experience in industrialized as well as developing countries has shown the problems created by uncontrolled urban sprawl such as poor access to sources of employment, high transportation costs and lack of community facilities and services. These problems are particularly acute for low-income families. Many newly urbanizing areas in third world cities have few or no public services. Therefore, it is extremely important that standards be established to assure the proper utilization of valuable urban land.

2. Reduce the costs of providing urban services.

With continued world-wide inflation, the cost of servicing urban development becomes increasingly more expensive. A substantial investment of both

public and private funds will be required to bring the level of public facilities in urbanizing areas of cities up to basic acceptable standards. Therefore, it is important that expansion areas be designed to assure that urban services can be provided as economically as possible.

3. Assure adequate land for public facilities and open space.

It is critical for the proper functioning of residential neighborhoods that adequately sized and located public facilities be provided. This is particularly true for high-density development because of the increased concentration of population.

TYPES OF STANDARDS

1. Land use standards

These standards determine how the land surface is used by setting a desirable percentage for various uses such as residential, circulation, open space, commercial, etc. These percentages are partially determined by detailed standards such as the width of streets and the size and proportion of plots. For example, in a residential area with primary streets, 16 meters wide and secondary streets 10 meters wide, 27% of the land will be used for circulation. If the width of primary streets is increased to 20 meters and secondary streets to 12 meters, the circulation space increases to almost 33% of the site.

The percentage of circulation space is also affected by the size and proportion of residential plots. As plots become smaller the percentage of circulation space increases. The effects of changes in various parameters are illustrated in the following section.

2. Infrastructure standards

It is obvious that the higher the level of services, the higher the cost of providing these services. There are basic requirements which must be met to create a habitable and healthy neighborhood. Certainly, access to the city and sources of employment, potable water supply and basic drainage and sanitation are required. There is great latitude in how these requirements can be satisfied. For example, a graded

gravel street can provide access as well as a paved street with curbs and sidewalk but at a substantially lower cost. Water can be supplied by individual house connections or by a less expensive system of public standpipes.

Most people would like to own a spacious plot in a neighborhood developed to a very high standard, but lower income categories of the population cannot afford to purchase such a plot. Infrastructure standards must be set such that an acceptable environment is created but at a price affordable by the target population.

COST CONSIDERATIONS OF DESIGN STANDARDS

The two factors having the greatest influence on costs of development are density and level of infrastructure. The effects of density on costs are obvious. If 30 families instead of 10 families divide the costs of developing one hectare of land, the cost to each family will be significantly reduced. Therefore, standards should be set which will create the maximum acceptable density. Obviously, efforts to reduce costs by increasing densities can be carried to extreme. Densities of 50 families per hectare would be very economical but may not provide acceptable conditions for area residents. Therefore, densities must be set such that plots are affordable by a target population but at the same time provide acceptable plots sizes and adequate levels of public space.

To study the effects on costs of different design parameters, a planning model developed by PADCO, a U.S. planning consulting firm has been used. The model, using a programmable calculator, analyzes the major parameters influencing urban development. The effect of changing one parameter on the other parameters can be quickly evaluated. Several examples using a variety of standards will illustrate the effect of both land use and infrastructure standards on the cost and affordability of a project.

In each example the density and the resulting monthly payment to purchase a serviced plot have been calculated. The financial terms used in all examples to calculate the monthly payment are 11% interest, 10 year repayment period and 10% downpayment.

1. Land use standards

Example 1 - Circulation space

As previously mentioned the width of streets influences the percentage of space used for circulation. If the density is lowered the cost of plots is increased. In Table 1, three different propositions for street width have been compared.

TABLE 1 - Circulation space

Proposition	Width of primary streets in meters	Width of secondary streets in meters	% of site for circulation	Density(1) plots/ hectare	Monthly payment F CFA	% Increase over Proposition 1
1	16	10	27.1	19.3	12,592	-
2	20	12	32.8	17.4	13,560	7.7
3	28	16	41.9	14.4	15,589	23.8

(1) Based on a plot size of 300 m2.

The only change made in standards is the width of streets, but this results in an almost 24% increase in the cost of a plot for proposition 3. Also the percent of circulation space is increased to almost 42% of the site.

Example 2 - Public space

Using proposition 1 of the previous example, the percentage of space reserved for public facilities and open space has been adjusted. The effect is not as dramatic as for increases in street width, but still an increase in public space increases the cost for residents.

TABLE 2 - Public space

Proposition	% Public space	Density (1) Plots/hectare	Monthly Payment F CFA	% increase over proposition 1
1	10	21.0	11,769	-
2	15	19.3	12,592	7.0
3	20	17.6	13,572	15.3

(1) Based on a plot size of 300 m2.

Example 3 - Plot size

As discussed above, density is the land use criteria that has the greatest influence on costs. Plot size is the factor that most directly affects density so is therefore one of the most important factors to be evaluated. In this example all factors remain constant except for plot sizes which vary from 200 m2 to 600 m2.

A N N E X A

INFRASTRUCTURE STANDARDS

	Proposition 1 Basic Level	Proposition 2 Medium Level
Primary Streets	Laterite	Paving
Secondary Streets	Laterite	Laterite
Drainage	Open earth channels	Open earth channels
Potable Water	Stand pipe at 200m	Individual connections
Electricity	Supply lines primary streets	Supply lines all streets
Street lighting	None	Primary streets

2. Infrastructure standards

One example will be given to show the obvious influence of the level of infrastructure on the cost of land development. Two standards, proposition 1 at a basic level and proposition 2 at a medium level, are evaluated in Table 5. (See Table 6 for the infrastructure standards.)

TABLE 5 - Infrastructure standards

Proposition	Level of Infrastructure	Plot size m2	Density Plots/ hectare	Monthly Payment F. CFA	% increase over Proposition 1
1	basic	300	19.7	7.843	-
2	medium	300	19.7	11.642	48.4

It can be observed that the higher standard of infrastructure is the most expensive and that the level of service along with the plot size are the two most influential factors on the final price. Particularly for low income families it is important to keep standards at an affordable level even though this may not be the most desirable at the present time. The project can be improved in the future as residents become established and incomes increase.

TABLE 3 -- Plot size

Proposition	Plot size m ²	Density Plots/hectare	Monthly Payment F CFA	% increase over proposition 1
1	200	26	11,227	-
2	400	14	16,229	44.6
3	600	10	20,649	83.9

The substantial influence of plot size on density and as a result costs is evident from the above table. With 600 m² plots the density is only about 10 plots per hectare which is very low by generally accepted standards for urban development. It can also be noted that the cost of 600 m² plot is almost 84% higher than that of a 200 m² plot.

Example 4 - Plot proportion

The size of the plot is the most important consideration but the proportion of the plot can also influence costs. The wider the frontage, the more expansive servicing will be. Table 4 shows the influence of the plot proportion on costs. All plots have a surface of 300 m² but with different ratios of length to width.

TABLE 4 - Plot ratio

Proposition	Plot size in m ²	Plot Dimensions	Ratio of Length to width	Density Plots/ hectare	Monthly Payment F. CFA	% increase over Prop. 1
1	300	12 x 25	2.08	19.0	12,729	-
2	300	14 x 21.4	1.53	18.4	13,833	8.7
3	300	17.3 x 17.3	1.00	17.4	15,727	23.6

It should be noted that as street frontage increases (ratio nears 1) the density is decreased because of higher percentage of space is needed for circulation. The monthly payment for a square plot (ratio 1) is almost 24% more than for proposition 1 even though it has the same surface. If a plot becomes very narrow (a ratio of over 4) it is more economical but not likely very compatible with beneficiaries lifestyles. It is best to have the length of the plot about twice the width or a ratio of 2.

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THE SECONDARY MARKET
FOR RESIDENTIAL MORTGAGES

A Guide For Developing Countries

by

R. BRUCE RICKS

This paper is prepared for a presentation Nov. 12, 1982 at a U.S.A.I.D. Office of Housing sponsored Shelter Workshop. This work is through a contract with the National Savings and Loan League.

The material is drawn from the author's activity in the U.S. as Chief Economist, Federal Home Loan Bank Board, 1969-72, where he was heavily involved in the creation of FHLMC, the first GNMA securities, and the development of secondary mortgage markets. He helped create PMI Mortgage Insurance Co. and has consulted extensively with AID in housing finance for CABEI, El Salvador, BIAPE, Costa Rica, and most recently Jamaica. Significant portions of the material comes from "Secondary Markets", a PMI training module which he helped prepare.

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In most developing countries, there is considerable focus on creating and improving mechanisms for the origination of mortgages - mortgages which come newly into being associated with the purchase or refinancing of property. We call this the primary market. With demand for mortgage credit exceeding the supply of funds by those institutions which originate mortgages in the primary markets, there is increasing attention to investment in existing mortgages or mortgage securities by those who do not originate the individual mortgages. We call this the secondary market for mortgages.

In many developing countries, the creation of and improvements in secondary mortgage markets can: 1) bring more funds into housing finance, 2) give liquidity to the asset portfolios of the mortgage originators, 3) help with institution building in the credit markets, 4) develop mechanisms which facilitate international lending to developing institutions in developing countries, 5) help build capital markets, leading to more active bond and stock markets, 6) be an attractive means for direct government allocation of funds to the housing sector as an alternative to government construction and ownership of housing.

For these reasons, the reader is encouraged to study herein: 1) the purpose and structure of secondary mortgage markets, 2) the way they have been developed in the United States, and to consider, while studying these matters, the ways these activities may be adapted and integrated into the financial structure of his or her' own country.

HIGHLIGHTS OF ADVANTAGES

Numerous opportunities can be found for a secondary mortgage market. Among these are:

- The secondary market has a multiplier effect.
- The secondary market provides cross-selling opportunities.
- The secondary market can spread portfolio risk.
- The secondary market broadens the lender's capabilities.
- The secondary market allows quality investments.
- The secondary market allows controlled growth.
- The secondary market is an economic indicator.

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The secondary market can increase portfolio yields.
The secondary market can expand loan portfolios at less cost.

NEED

At any point in the business cycle, there are capital deficit areas of the country - where lenders experience mortgage demand greater than their supply of mortgage funds, and capital surplus areas - where demand is slow compared to savings.

Mortgages are illiquid because of their heterogeneity. Mortgages, which account for most residential lending, are originated by many different lenders, each according to its own standards. There is no method of grading these mortgages, so that rather than trading a commodity, each unit of which is like every other, lenders are trading units that by their nature differ from each other. This has led to inefficient, cumbersome and time consuming techniques of sales.

Until 1970, in the United States, this market was unstructured, functioned on a highly personal basis, and often depended upon established business relationships. Mortgage loan originators who wished to deal in the market usually transacted business by contacting former customers or brokers with whom they had previously conducted business. A buyer might insist upon personal review of the loan and even inspection of the underlying properties and the seller's recordkeeping and servicing procedures.

Lacking a central market place, traders in the secondary mortgage market had few guidelines for judging prices, yields, and other characteristics of the loans being offered. Sellers encountered

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difficulties finding buyers during periods of credit stringency, even when some area of the country had surplus capital. Lack of adequate market information forced buyers and sellers to search inefficiently for each other, and the cost of the search eventually was reflected in the cost of originating the loans.

THE SOLUTION - AN ORGANIZED SECONDARY MARKET

The liquidity provided to mortgage finance institutions through the secondary market is important to meeting primary demands for mortgage loans. In areas where and at times when mortgage demand is heavy, lenders can quickly become "loaned up", with all their available funds tied up in mortgages or committed for future loans. If no additional sources of funds are readily available at a reasonable price, these institutions will need to reduce their level of lending activity, and their reduction will adversely affect both new construction and sales of existing units.

By selling loans in the secondary market, lenders recycle their funds, pulling their capital out of long-term mortgage investments and reinvesting in new mortgages. The resulting increase in the velocity of mortgage capital is important to maintain and increase the flow of funds into housing finance.

Obviously the capability of the secondary market to match sellers and buyers, and thus to provide additional funds for investment in the primary market, is the key to secondary market effectiveness. The market's efficiency is hindered by the lack of a central market place and by the wide geographical dispersion of potential traders. Thus, although capital surplus areas and capital deficit

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areas exist simultaneously during most periods, buyers and sellers from these areas often experience difficulties locating each other, and the volume of secondary market trades remains below potential. An inefficient secondary market restricts the flow of funds back into the primary market.

In addition to providing liquidity to the primary market by facilitating the trading within the mortgage finance industry, the secondary market draws investors such as pension funds, financial institutions with long term reserve investment requirements, governmental agencies with reserves and others who do not traditionally invest in mortgages and who would not want to establish origination capability. These investors are a very important supplement to the supply of mortgage credit.

The secondary market we see has three main functions: 1) to bring together buyers and sellers, and in the process move capital within the mortgage finance industry from surplus areas to mortgage deficit areas, 2) to attract new investors to mortgages in order to supplement the supply of funds within the industry, 3) to serve as a dampening influence on the effects of disintermediation, providing institutions facing savings outflows a ready market for their mortgages so that adequate capital may be provided to meet rising loan demands despite overall credit stringencies.

FNMA, GNMA, THE MORTGAGE CORP.

The U.S. government created three major entities to assist the secondary market in improving mortgage liquidity: Federal National Mortgage Association (FNMA or Fannie Mae), Government National Mortgage Association (GNMA or Ginnie Mae), and the Federal Home Loan Mortgage Corporation (FHLMC, The Mortgage Corp. or Freddie Mac

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Oldest of the three is FNMA, created in 1938 to provide a market for the new FHA insured loans. Until 1954, FNMA was entirely a government operation. A series of changes since then culminated in 1968, when the original company was split into two separate corporations. One corporation continued as a government agency, known as GNMA. The other became privately owned and managed, retaining the name FNMA. Its principal activity is to buy mortgages in the secondary market to support homebuilding.

The second entity, GNMA, is a government corporation, part of the Department of Housing and Urban Development. GNMA has two major functions: 1) a special assistance function under which it purchases FHA and VA mortgages at below market prices to support the construction sector, and 2) a mortgage-backed securities program in which it guarantees long-term securities issued by mortgage originators against pools of mortgage loans.

The Fedreal Home Loan Mortgage Corporation was established by Congress in 1970 to increase the availability of residential mortgage credit for American homebuyers by developing and maintaining a secondary market for conventional (non Government insured) residential mortgage loans, with particular emphasis on the savings and loan industry. The Mortgage Corporation has become a major force in the market place, responsible for innovations that have increased liquidity for conventional loans.

Each of these entities has a different emphasis, different programs, and differences in the ways they finance mortgages. Let us review each in turn.

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FEDERAL NATIONAL MORTGAGE ASSOCIATION

FNMA purchases, services, sells and otherwise deals in mortgages, primarily on residential properties, and also lends on the security of mortgages. It does not make direct mortgage loans in the primary market, but rather invests in mortgages originated by others when primary lenders are short of funds. FNMA thus provides liquidity for the secondary market in residential mortgages. It is the nation's largest single supplier of funds for homes and apartments and during most years is the nation's largest borrower except for the United States Treasury. The corporation is owned by private stockholders. Its stock is listed on the major exchanges. An unusual feature of its organization is that five of the fifteen members of the Board of Directors are appointed by the President of the United States, who is required by law to select at least one of his appointees each from the homebuilding industry, the mortgage lending industry, and the real estate industry. The other ten directors are elected annually by the stockholders in the usual manner.

At one time FNMA carried on its mortgage purchase operations by posting prices at which it would buy mortgages over the counter - that is, for immediate delivery. The prices, which varied by geographic areas, were determined on the basis of frequent surveys of mortgage yields. The system had several disadvantages. Despite the frequency and care with which the prices were set, it was difficult to keep up with all the price fluctuations that constantly took place in the mortgage market. Second, the system tended to discriminate among local mortgage markets. It was difficult to make realistic distinctions as to mortgage prices in the many areas, especially since the very activities under which mortgages were being purchased were helping to create a more

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uniform national market for the entire FNMA portfolio. Also, the over-the-counter purchase system failed to give members of the homebuilding industry the insurance they needed in order to plan ahead.

A new method for the purchase of mortgages was developed in order to avoid the defects of the posted price purchase system. It was first used in 1968 and known as the Free Market System (FMS) commitment auction. It has become FNMA's principal method of issuing commitments for the purchase of mortgages on 1-4 family homes. As the word " auction " indicates, those who wish to sell mortgages to FNMA bid against each other by specifying the yield that would be produced by the mortgages that they each offer for sale. As the word " commitment " indicates, FNMA enters into agreement under which it is committed for a specified period of time to purchase (at the yield specified in the commitment) the mortgages offered by the successful bidders if they wish to complete the sales transaction.

Because the many competing bidders under the Free Market System are in constant touch with the mortgage market, FNMA receives additional assurance when it accepts bids in the higher ranges that it is achieving the yield on its investment which reflects current market conditions more accurately than was possible under the fixed price system. The auction system has a further advantage of providing an unbiased market mechanism, previously lacking, for allocating scarce funds among local market areas.

Finally, commitments by FNMA to make later purchases of mortgages at yield agreed upon in advance enables mortgage sellers, and the home builders and real estate companies served by them, to plan their future activities in reliance on the availability of FNMA's secondary market financing should it prove needed.

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FNMA permits prospective sellers to submit two kinds of bids in the Free Market System auction. The basic " competitive " bid is submitted for the sale of stated dollar volume of mortgages at a specific yield. Sellers are also permitted to submit a " non-competitive " bid to sell a specific volume of mortgages at the weighted average yield -- whatever that may prove to be -- of all competitive offers accepted in the auction. The notice announcing the auction also specifies the period of time during which FNMA is committed to purchase the mortgages from the successful bidders. FNMA collects fees for these commitments - a major source of its income. The fees are designed to compensate for the risk the corporation bears that interest rates will rise during the commitment period. The successful bidders do not bear an equivalent risk, since they are not obligated to sell the mortgages to FNMA, but are free to sell them elsewhere -- for example, to another investor.

FEDERAL HOME LOAN MORTGAGE CORPORATION

The Federal Home Loan Mortgage Corporation has sought to achieve two goals: to relocate funds available for mortgage lending within the thrift industry from capital surplus areas to capital deficit areas; and to direct funds from outside the thrift industry into mortgage lending.

When The Mortgage Corporation was chartered in 1970, secondary market activity in conventional mortgages was quite limited. Uniform documentation and underwriting standards and government insurance facilitated the trading of FHA and VA loans, but did not exist for conventional loans. As a result, conventional loans, which dominated mortgage origination activity, had little liquidity.

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To establish purchase programs for conventional loans, The Mortgage Corporation developed a system of uniform loan documents. Since prior to this the laws of fifty states and the desires of the legal department of each lender determined the language of lending documents, this standardization was a herculean task.

The Corporation has used various debt instruments to finance its operations, including joint financing with the Federal Home Loan Banks and issuance of GNMA guaranteed bonds backed by FHA and VA mortgages. These methods were considered temporary until successful sales programs were developed. From inception, The Mortgage Corporation, unlike FNMA, intended to minimize operating as a mortgage accumulator or warehouse, which is a corporation that finances purchases of long term mortgages through sales of short-term or intermediate-term debt. It wanted to avoid the substantial refinancing risk associated with this refunding type of transaction. Not only has The Corporation sought to achieve balanced financing (matching of purchase and sales volumes and maturities) to avoid the risk inherent in the mortgage accumulator's role, but it has also had as its goal the development of instruments to facilitate the sales of conventional mortgages on a nationwide basis and to attract new funds to mortgage finance during periods of credit stringency.

To accomplish these objectives, The Corporation developed two mortgage securities, the Mortgage Participation Certificate (PC) and the Guaranteed Mortgage Certificate (GMC). The Mortgage Participation Certificate (PC) passes through interest and principal monthly as received on the underlying mortgages, and thus is of special interest to the thrift institutions, because it qualifies as a real property investment for purposes of laws and regulations governing the thrifts.

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MORTGAGE PARTICIPATION CERTIFICATES

In 1971, The Mortgage Corporation began to assemble mortgages it had purchased into groups and to sell securities representing undivided proportional interests in each mortgage in the pool. To be successful, such an instrument had to have characteristics which would make it attractive to thrift institutions seeking additional mortgage-like investment opportunities.

The PC offers investors the following features:

1. Classification as a mortgage investment for the purpose of regulation and tax laws applying to thrifts.
2. Timely payment of interest and ultimate collection of principal guaranteed by The Mortgage Corporation.
3. Functions of intermediate service, transfer agent, and registrar performed by The Corporation, with each PC holder receiving one monthly check regardless of the number of certificates purchased.

Initially PC's were sold periodically in special sales as groups of adequate size (\$100 million) were assembled. Beginning late in 1974, The Corporation maintained a continuous market for the certificates. Since January, 1977, PC's have been offered each Monday morning in large weekly sales through The Corporation's marketing department in its Washington D.C. office and through a securities dealers group. The broker group, by adding to the liquidity and flexibility of the instrument, has increased the proportion of PC sales to investors other than thrift institutions.

PC's are important in the operation of The Mortgage Corporation,

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serving as the major vehicle by which funds are recycled from highly liquid associations, many of which are consistently at liquidity levels well in excess of minimum requirements. The Corporation's sales of PC's to such institutions draw these funds into the secondary market, increasing the supply of funds from capital already within the thrift industry.

GUARANTEED MORTGAGE CERTIFICATES

The recycling function performed by The Corporation is most effective during periods of stable or declining interest rates when excess liquidity exists within the thrift industry and thus may be directed to capital deficit areas. During periods of credit stringency, however, the rising demand for mortgages strains the available supply of funds which is experiencing a corresponding decline. At such times, new sources of mortgage finance must be reached to supplement normal credit sources. To deal with this problem The Mortgage Corporation created the Guaranteed Mortgage Certificate (GMC). Just as the PC is designed to be attractive to thrift institutions, the GMC is designed for institutional investors in the capital markets by meeting their objections to mortgage investments.

Like PC's, GMC's represent undivided interests in specific mortgages. Investment in a GMC is ownership of a proportionate share of each mortgage in the underlying pool. The GMC offers investors the following features designed to meet their investment needs:

1. Semi-annual payment of interest and annual repayment of principal.

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2. Minimum principal reduction payments according to a pre-determined schedule.
3. Unconditional guarantee by The Mortgage Corporation of interest payments to the extent of the certificate rate and ultimate collection of principal.
4. Published notice not less than 25 days before principal date of amount of principal to be paid when principal payments exceed scheduled minimum amounts in a given year.

By offering mortgage certificates with semiannual interest payments and annual principal reduction rather than monthly payments of the pass-through instruments, The Mortgage Corporation eliminated an obstacle for institutional investors. GMC features allow investors more precise cash management and reduce the reinvestment risk associated with more frequent return of investment. The guarantee attached to the GMC overcomes investors' concern with evaluation of mortgage quality, since holders of GMC's need look only to The Mortgage Corporation for interest and principal payments, rather than to the quality of each underlying mortgage loan.

GOVERNMENT NATIONAL MORTGAGE ASSOCIATION

GNMA has three basic areas of responsibility: 1) Approval of issuers and guarantee of Mortgage Backed Securities, 2) Management and liquidation of portfolio mortgages resulting from FNMA operations prior to 1954, 3) Secondary Market purchases of mortgages when such purposes serve to accomplish government policies and objectives. We shall concentrate on the first of these.

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The GNMA Modified Pass-Through security, being issued and sold in today's market place, guarantees the security holder principal and interest due, whether or not received by the servicer of the pool. Again, the term " modified " simply means the payment of interest and principal are paid to the investor whether or not collected from the homeowner. Because the issuer has this requirement, it is strongly advisable to select loans for the pool which are most likely to have good payment records over the term of the security. A heavy delinquency experience on a pool can strain an issuer's cash reserves through the foreclosure period of the mortgages. The timely payment of the interest and principal by the issuer over the life of the security is guaranteed to the investor by GNMA, and that guarantee is the full faith and credit of the United States Government. The securities are exempt from registration under the Securities Act of 1933 and do not constitute a liability of or evidence any recourse against the issuer.

Each security certificate is collateralized by a pool of mortgages insured by either the FHA or VA. Each pool must consist of the same type of mortgages (single family, project, mobile home, etc.) , bearing the same interest rate, and having approximately the same maturity.

SECURITIES ISSUED BY ORIGINATORS OF MORTGAGES

Increasingly, originators of mortgages are issuing securities without the GNMA guarantee. In order to differentiate between borrowing funds and selling mortgages, an understanding of the difference between a sale of assets and issuance of a debt obligation is essential.

A sale of assets occurs when a loan originator sell an interest

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or sell whole loans to an investor. The seller transfers title or interest in the loans and then usually services the loan for the investor for a fee. There is no liability to the investor in the event of default on the mortgages. Recourse is only to the underlying loans. Exception to this occurs in regard to The Mortgage Corporation's PC's and GNMA securities. Although PC's represent a sale of assets, there is an unconditional guarantee by the issuer. On a GNMA security, the issuer's promise to pass through payments is on a non-recourse basis. The only recourse is to GNMA, the guarantor, and to the underlying loans. When a sale of assets occurs, profit or loss based on the difference between carrying value and sales price must usually be recognized at that time.

A debt obligation occurs when the mortgage loans are pledged as collateral for borrowing purposes. An interest in the underlying loans is not purchased by the investor. The investor is simply lending funds to the issuer, whose promise to pay back these borrowed funds is collateralized by a pool of mortgages. The loans remain on the asset side of the issuer's financial statement, with the debt obligation appearing as a liability. The dollar amount of loans pledged as collateral is shown as a footnote. Since the mortgages are not sold, just pledged, profit or loss is not taken at the time of the borrowing. Cash flow from the mortgages continues to the issuer, and there is no restriction on its reinvestment.

CONVENTIONAL PASS-THROUGH MORTGAGE-BACKED SECURITIES

It was indicated that the GNMA Modified Pass-Through deals only with mortgages in the pools which are FHA or VA insured. There has been a need for such a security with conventional loans as the underlying security. In October, 1977 the first Conventional Pass-Through Security was issued by the Bank of America, and a second one in November, 1977 by First Federal Savings and Loan of Chicago. Since this pioneering beginning, many have been issued by many originators.

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Conventional mortgages are assigned to a trustee and a formal trust is established. The originator then handles the issuance of Mortgage-Backed Certificates, technically on behalf of the Trust. The originator/issuer services the mortgages and remits funds to the certificate holders on behalf of the trust.

Pertinent points of the security are:

- 1) A sale of assets occurs from the originator to the trust.
- 2) Cash flow from the mortgages is passed through to the certificate holders
- 3) 3. The issuer agrees to pay timely payment of interest and principal, but not on a recourse basis. (The issuer indicates intent, but not obligation.)
4. The underlying loans usually carry private mortgage insurance issuer by one of several PMI companies in the United States.

Significant differences between the Conventional Pass-Through Security and the GNMA Security are that on the former there is no guarantee of timely payment - the issuer's agreement is an " intention " rather than a promise; and the loans are privately rather than Federally insured. The issuer may " elect " to forward principal and interest due but not received, if the issuer believes that those payments are collectable under the private mortgage insurance policy, should the mortgage actually reach foreclosure

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MORTGAGE-BACKED BONDS

The issuance of Mortgage-Backed Bonds was approved by the FLHBB in May, 1975. While slow to be adopted by the industry, in 1977, a number of substantial associations came to the market for the first time with large public issues. The FLHBB defines a MBB as " any borrowing (other than a borrowing from a FLHB) secured in whole or part by one or more real estate loans ". MBB's are used by thrift institutions to raise capital from sources other than their FHLB or a commercial bank line. Through the use of a MBB, a thrift can liquify funds tied up in long-term, low coupon mortgages that may represent the greater part of its assets.

A MBB is a debt obligation secured by a pledge of mortgage assets. The mortgages may be conventional or FHA/VA. It is not a pass-through security of any type and does not give the purchaser an ownership interest in the mortgages used as collateral. MBB's vary in maturity and prepayment schedule. All issues to date have interest payments semiannually and principal payments ranging from annually to a single payment at the end of the term of the bond. These terms range from 5 to 15 years. Bonds may contain a " call " provision whereby the issuer has the right to retire some or all of the remaining principal balance of the bond at predetermined dates in the future. Issues may also contain a limited " put " permitting the investor to cash in the bond at his option at some predetermined date(s) in the future.

A primary factor in obtaining market acceptance is the degree of over-collateralization of the pool and the type of underlying mortgages. Over-collateralization occurs when mortgages are pledged with a market value that is significantly greater than the dollar

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amount of the bond to be issued. There normally exists a provision in the bond stating that the issuer must maintain some minimum level of over-collateralization during the life of the issue. The over-collateralization is important to bondholders: 1) to be certain that the pool contains sufficient collateral to withstand drastic changes in market conditions, so that if defaults occurred in mortgages the pool would contain sufficient assets to be marketable with no significant increase of risk to the new bond purchaser, 2) to guard against any shortfalls in principal or interest payments that might otherwise occur during periods of fluctuating interest rates.

Accountingwise, the mortgage assets continue to be shown on the books of the issuer. The debt is a liability, and the amount of mortgages pledged is shown in a footnote.

PRIVATE PLACEMENT

These various mortgage-backed securities may be placed directly with an institutional investor, but are in this case generally considered not to be resalable after the initial purchase. There is no "after-market" or secondary market for the security itself, and for this reason private placements will carry a yield of about 25-50 basis points higher than a public offering. The advantage to the issuer is that a rate can be negotiated early in the transaction, giving the issuer some protection from fluctuating market rates. The issuer can also deal directly with the investor and compose both the mortgage pool and the security terms to mutual satisfaction. Not infrequently, the investor wants to help, by the directing of his investment funds, some particular section of the country or some particular constituents such as pension beneficiaries or union members without being involved in direct lending or pressure to subsidize.

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There are no registration requirements for a private placement. This saves time and money.

PUBLIC OFFERING

When a public offering is chosen by the issuer it is usually of a sufficient size that a secondary market for the particular issue can develop. Generally, the investment bankers handling the initial offering agree to make a secondary market in that offering. Therefore, these issues are more liquid than private placements, and thus the yield requirement for the investor is less. The corresponding disadvantage is that the issue must conform to those already trading in the secondary market for such issues. An initial public offering takes about three months to reach the market (Subsequent offerings by the same issuer can reduce this time by approximately one month.) During this processing period interest rate may fluctuate greatly, and the issuer may find that the rate advantage which caused him to want to offer the issue has disappeared.

APPLICABILITY TO DEVELOPING COUNTRIES

The concepts and terminology used may seem confusing, but the processes and some of the instruments described are highly applicable to developing countries. For example, in Guatemala and Chile, cedulas, mortgage participation certificates, have been purchased by individuals for years. Since the early 1970's The Central American Bank for Economic Integration (CABEI or in Spanish BCIE) has been buying mortgage participations and is considering buying mortgage backed bonds issued by institutions in its " customer " countries. In Jamaica, the Jamaica Mortgage Bank is ceasing its primary market activities in order to serve housing finance better by concentrating on the secondary market.

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You are encouraged to investigate how the techniques described in this paper or other secondary market solutions apply the the present and future financial structure of your country.

GLOSSARY OF TERMS

BASIS POINT

- Basis points are fractions of 1%. One basis point = 0.01, 2 basis points = 0.02, and so on. The difference in .75 and .50 is 25 basis points (.25). The difference between 8.75 and 8.375 is .375 (or 37 and $\frac{1}{2}$ basis points).

BUY-BACK

- An agreement whereby a seller of mortgages in the secondary market agrees to repurchase individual loans under specific circumstances such as default.

COMMITMENT

- An advance agreement to provide funds for mortgage loans. In secondary market transactions, it is usually a very specific agreement as to term and conditions of sale, and is frequently achieved by the investor endorsing the seller's offering letter.

DISCOUNT

- A measurement, in %, of the difference in the amount paid (price) for a loan, and the actual amount of the loan.

Example: \$40,000 mortgage purchased at a price of 98%=\$39,200. The difference between the amount paid (\$39,200) and the actual amount of the mortgage (\$40,000) = \$800 or 2%.

DISCOUNT (continued)

$$\begin{array}{r} 100\% \text{ or } \$40,000 \\ - 98\% \text{ or } \$39,200 \\ \hline = 2\% \text{ or } \$ 800 \end{array}$$

This loan was sold at a 2% discount.

FEEs

- \$ amount, measured in % that the seller pays the purchaser for a commitment to purchase loans - 1% fee on a \$1 million purchase is \$10,000.

FELMC

- Federal Home Loan Mortgage Corporation--
A secondary market facility of the FHLB System, which is authorized to buy and sell conventional, FHA, and VA loans, and participating interest in blocks of such loans.

FNMA

- Federal National Mortgage Association--
A government-sponsored, but privately owned, corporation which supplements private mortgage funds by buying and selling FHA, VA, and conventional loans.

GNMA

- Government National Mortgage Association--
A government corporation that provides special assistance for certain FHA and VA loans, and guarantees securities backed by mortgage loans.

GNMA

- Government National Mortgage Association--
Guarantees the payment of principal and interest of FHA/VA loans sold

GNMA (continued)

in the form of a security, to an investor, by a seller. Carries the full faith and credit of the U.S. Government.

INSTITUTIONAL
LENDER

- A mortgage lender that invests its own funds in mortgages and carries a majority of such loans in its own portfolio, i.e., mutual savings banks, life insurance companies, commercial banks, savings and loan associations. Although individuals hold mortgage loans and service them, they are not classified as institutional lenders.

IMMEDIATE DELIVERY

- The physical delivery of loans from the seller to the purchaser for immediate underwriting and purchase by the investor, normally though to be within 30 days from the date of the commitment letter.

MORTGAGE BANKER

- A firm which originates real estate loans and ultimately sells them to investors. A mortgage banker frequently will hold the loan temporarily for his own account, by using his bank lines of credit.

MORTGAGE BROKER

- (Loan Broker). In the primary market, an individual that originates and processes loans in the name of and for the portfolio of another. For this service he receives a fee. In the secondary market,

- MORTGAGE BROKER (cont.) an agent that specializes in arranging the purchase and sale of mortgages for a fee.
- NET YIELD - That part of the gross yield (interest rate) which remains after the deduction of all charges or costs.
- 90-10 PARTICIPATION - A loan sale where the seller (usually a S&L or Commercial Bank) sells 90% interest in each loan to an investor and retains 10% of the loan and the ownership of the loan. The seller and purchaser share on a 90-10 basis, the principal and interest of the remittances and also pro rata in the gains or losses in case of foreclosure. This type of deal requires a large capital base in order to hold 10% of the loans.
- NON-CONFORMING
LOAN - Any loan which does not conform to the FHLBB regulations, such as term, loan amount, loan-to-value ratio, occupancy or use.
- OFFERING LETTER - A letter sent by a seller in the secondary market to a potential investor which outlines the details of the potential transaction involving a package of loans, and includes information such as type of loans, location, yield, delivery, etc.
- PAR - The actual amount of a loan or 100% of the loan.

PARTICIPATION
LOAN

- A mortgage loan in which more than one association has an ownership interest in the principal balance. The servicer of this type of loan receives the full debt service payment and then remits to the participants their pro-rata share of the principal and interest.

PREMIUM

- The same definition as discount, except here we are dealing with prices over 100% or par. The premium is that amount paid for a loan over the actual amount of the loan. Example: \$40,000 mortgage purchased at a price of 102%=\$40,800. The difference between the amount paid (\$40,800) and the actual amount of the mortgage (\$40,000) = \$800 or 2%.

$$\begin{array}{r} 102\% \text{ or } \$40,800 \\ -100\% \text{ or } \$40,000 \\ \hline = +2\% \text{ or } \$ 800 \end{array}$$

This loan was sold at a 2% premium.

PRICE

- The amount, measured as a %, paid for a mortgage in relation to the amount of a mortgage.

Example: \$40,000 mortgage sold to an investor at a price of 98% = \$39,200.

SERVICING

- Quoted as a %. The difference in the coupon of a loan and the yield guaranteed to the investor on the loan.

STAND-BY (continued)

Example: A 12-18 month stand-by is one where the seller cannot deliver for 12 months. Then he can deliver between the 12th & 18th month, at his option. This type of deal is obviously risky for the investor and, therefore, demands a higher yield requirement and more fees.

THIRD PARTY
PARTICIPATION

- A transaction where an investor who has purchased a package of loans, sells, to a third party, a participating interest on that package of loans.

VARIABLE RATE
MORTGAGE

- A mortgage contract that permits an increase or decrease in the interest rate, generally in response to changes in some specified financial indicator.

WAREHOUSING

- The borrowing of funds on a short-term basis at a commercial bank with the permanent mortgage loan pledged as collateral.

WHOLE LOAN

- A loan whereby the seller retains no interest in that loan but normally continues to service for a fee.

WHOLE LOAN SALES

- A loan sale where the investor purchases 100% of the loan, and the title and ownership is transferred to the investor. These types of deals are done mostly with Mortgage Bankers.

SERVICING (continued)

Example:

Coupon=9%

Yield to investor=8.625%

 Servicing fee = .375%

This represents the income on the loan for the seller, after sale, excluding any discount or fees earned previously.

SERVICING

- The collection of payment of principal and interest, and trust fund items such as fire insurance, taxes, etc., on a note by the borrower in accordance with the terms on the note.

SERVICING
CONTRACT

- A document which enumerates specific servicing requirements and legally binds the servicing institution to perform them. It sets the conditions and methods pertinent to the servicing of the loan and the disposition of fees, penalties, and monies, in the event the loan is delinquent or foreclosed.

STAND-BY

- A future delivery deal with a major exception. The seller has the sole option of delivering the loans. He may simply not deliver and sell the loans elsewhere. These commitments normally have a "lockout" time period where the seller cannot deliver, and a "window" which is the time frame he can deliver if he desires.

YIELD

- Rate of return on investment, measured in % form. In secondary marketing, the rate of return given to the investor on the funds spent for the purchase of loans.

Example: $8\frac{1}{2}\%$ net to the investor on a loan purchase of \$1 million means that the investor will earn $8\frac{1}{2}\%$ on the money he used to purchase the \$1 million of mortgages.

The difference in the yield ($8\frac{1}{2}\%$) and the cost of funds ($6\frac{1}{4}\%$ avg. for the S&L Industry) is called the spread or $2\frac{1}{4}\%$.

PRESENTATION TO SHELTER WORKSHOP

JAMES R. KEEN

RESOURCE MOBILIZATION: BETTER MARKETING

TO ATTRACT MORE SAVINGS

This may be terribly "American", but, without my even having made your acquaintance, I will make an assumption about you. Knowing absolutely nothing about you individually, I am going to assume that by now you have been asked to absorb so much heavy material, so much detailed information during your seminar meeting, that your mind and body are satiated. They are saying "enough, enough!"

Well, now you can relax. The ideas we are about to share are so basic, the concepts so simple, the information so straight forward, that your minds and body will feel as if they've been treated to a light, delicious dessert.

I want merely to talk to you about two-way marketing communications. To share with you my experiences in the development and production of advertising and sales promotion programs for housing finance institutions, during the past 15 years here in the United States, and during the past 3 years in the Ivory Coast, Kenya, Tunisia, Lebanon and Egypt.

Why worry about marketing? Because in many countries a large percentage of the population is not using the banking system. And we know that those people do save. We see their savings in construction materials, in self-built homes, and in remarkably large down payments. We also know that they want more financial services. How many of you have closed down bank offices because nobody came in to ask for a loan? Not many, I'll bet. Thus, if we are going to mobilize more resources for housing, I would suggest that we take a hard look at a vital primary resource, the untapped savings of the majority of the population.

My material will be so easily absorbed because we will simply talk about people and how we can best determine and best serve their needs and their desires. The concepts are so simple because people are simply the same everywhere . . . throughout the world, with some slight differences, of course. For example . . . We Americans.

We are pet-happy people. Americans give legitimate homes to dogs, cats, birds, and a variety of exotic tame, and sometimes wild creatures to the extent that nearly one-half of the households in the United States, contain one or more pets totalling more than 70 million animals. A great deal of money is spent on their upkeep. \$6 billion per year on food and flea collars, haircuts, and hospitals, on and on. Consequently, a great deal of money is spent within the industry on sales and marketing of pet products to their eager owners. \$200 million per year for advertising alone, not to mention the costs of colorful packaging of these products to catch the eye of the pet owner in grocery stores, pet stores, and mail order catalogs.

I offer you this astounding, earth shaking information because the message I want you to take home concerning marketing communications can be illustrated in a related story. A story about serving the needs of large potential target markets. I'll even make absurd exaggerations within this story about our free market enterprise to make the message crystal clear.

O.K. Imagine with me, if you will, the situation encountered by this cat food company . . .an aggressive manufacturing concern with an aggressive Board of Directors who decided they should try to capture the majority share of the huge cat food market. They marshalled the forces of the best available minds and talents. They concentrated on a dynamic design for the package. The colors, the photographs, the graphic elements of the package were all thoroughly tested and refined for impact and attraction. The review committee unanimously and enthusiastically approved the cat food package. They knew they were looking at a powerful impulse sale item. They were certain that the immediate reaction of the customer would be to grab it off the grocer's shelf. . .the cat lover absolutely could not resist the purchase.

The test marketing quickly confirmed this beyond their wildest dreams. Sales were fantastic and the company's management decided to go directly to maximum production and distribution of the cat food. New manufacturing, packaging, and shipping facilities were constructed, and sales of the product zoomed as it was launched nationwide with a gigantic advertising and sales promotion campaign.

The sales curve rose sharply on the charts. . . but just as quickly it stopped. Instead of leveling off, it took a precipitous dive and plunged way below the level achieved in the test market stage.

Panic. PANIC permeated the company's junior and senior management levels. Fingernail scratches could be seen on the polished surfaces of the Board room conference tables. Meetings upon meetings were scheduled at all levels to find the cause for the potentially fatal drop in sales after such a successful campaign launch of the enormously profitable new cat food.

In a period of time which seemed like years but was actually just a few days into the turmoil, word quickly filtered to the top that a certain Mr. Sam Jones, a relatively newcomer to the company who worked in the research department had the answer to the sales problem. He claimed to have uncovered the reason why the sales of the company's cat food had plummeted after what had seemed to be the success story to end all success stories.

Mr. Jones was urgently summoned to the Board room. The great and quick minds of the corporate management and major stockholders sat leaning forward to catch the answer. . .to finally solve the problem. "Sam, tell us quickly. . .WHY? Why was CattyKit Meals such an instantaneous success and then an even more instantaneous failure? Why Sam, why?"

Sam paused, pleased with the drama of his presence. . ."Well, Mr. Chairman, it has been proven beyond a shadow of a doubt, the cats don't like it."

Within this not-altogether-fictitious tale, could there possibly be the kind of similarity to the approach we sometimes use in developing and selling our housing finance products and services? Could we possibly be a little guilty of over-enthusiastic planning in our attempts to solve the housing crisis among lower income target populations in our own countries? Just possibly?

During the past three years (1979-80-81), I have been privileged to work among those who make up the target groups of low income housing grant or loan funds in the Ivory Coast, Kenya, Tunisia, Lebanon, and Egypt. I use the word "privileged" in all sincerity as I have learned from these people. Learned that much of the tremendous weight of time, effort and money spent to solve their problems, is dissipated before it even begins to influence their immediate world. Learned that some of the commitment to help them solve their problems is high-gloss commitment. . .efforts which create bright reflections of progress during each phase of the involvement but which may dim the vital importance of the end product. . .improved shelter, improved community facilities and a general and long-lasting improvement in the quality of life for those people we are attempting to serve.

All too often, we find that too many people are involved in the marketing process and the high cost of their salaries and benefits reduce the available funds. This results in too much time involved in the process for decision making (and the lack of it) which not only increases overhead costs, it increases the likelihood that the target groups needs may have changed in the interim, necessitating a repeat of the entire process.

Explore with me, if you will, some of my personal and professional experience with these target groups at home and abroad.

The primary purpose of these explorations will be to clearly identify the process of marketing communications as a two-way street. We may also uncover ways of shortening the savings and loan marketing time span and, thereby reducing the overall costs of mobilizing the resources of assistance program target groups. We will see how to tap the strengths of those target groups in creating better, more economical, more productive means and methods to solve their problems. "Help us help ourselves" seems to be the message which is coming through most loud, most clear.

Unfortunately, "help yourself" can be interpreted as an invitation to take whatever you want, free gratis, with impunity. While the advice throughout the presentation is to maintain closer, more direct communications with the target customer groups, caution must also be maintained. Don't go "too far" with that advice.

It has been proven over and over that people of all income levels in all parts of the world will make the necessary sacrifices to fulfill their commitments when the motivations are sufficient and obvious. It has also been proven over and over in all parts of the world that those same people will take advantages of those same situations when the absence of "penalties" make it seem ludicrous NOT to circumvent authority.

As lending activities increase through successful resource building programs, eviction may be required to reinforce the motivation for making regular monthly payments.

A word to the wise is sufficient.

The trip to Beirut, Lebanon in the fall of 1980, was an interesting, unusual experience, to say the least. The National Housing Bank, la Banque d'Habitat, was located in the downtown financial area. . .the streets of banks. . .immediately adjacent to the infamous "Green Line", the no-man's-land area separating East and West Beirut.

Waldo Klat, Bank President, had put together a staff of energetic, committed individuals with high levels of experience in their specific fields of influence. The initial thrust was to provide home construction and improvement financing and had achieved some measure of success in this area.

The Bank sought technical assistance from USAID in the planning and development of individual savings account mobilization to augment their loan programs. Two factors limited this development. One, the bank's sole facility was on the sixth floor of the Jamahl Trust Bank building and the access routes were routinely closed by sporadic exchanges of small and large arms fire. . .daily displays of strength by the opposing forces. Two, the bank had a more than ample supply of low interest rate funds available on demand from the Central Bank which precluded any real need to seek higher cost deposits from a broad, individual customer base.

These two considerations which limit the need to aggressively seek private savings deposits are common to many National Housing Banks.

If runaway inflation and political unrest are part of the daily lives of most families, it is not conducive to the development of consumer savings since it destroys most of the traditional appeal of savings. Increasing costs of real and personal property make it advisable to borrow and buy now rather than save and pay more later. And "return on investment" is out as the rate of inflation is well above the rate of interest paid on savings.

If I may interject another observation here, many (especially the newly created) National Housing Banks may find their efforts to expand their savings services thwarted by other financial agencies.

Intra-agency "jealousies" are a fact of life within most economies and no amount of well-meaning rhetoric and wishful thinking will make them disappear. The barriers posed by such overactive protection of territory can be effectively circumvented, however, when opportunities for expansion of services are handled on a limited project basis.

Project efforts, by their very nature, allow "competing" agencies to work effectively and efficiently on a cooperative basis because the fear of long term change in the power structure is minimized.

Such was the dilemma faced by one Savings and Loan Bank in its attempts at savings mobilization beyond the scope of the incumbent contract-saving procedures. A "free" savings approach was the next logical step for the bank to expand its resources and be able to provide additional funds for home construction. The bank offered to take its ideas to the less populous areas and serve the population of the regional communities. The commercial banks felt any attempt by the Housing Bank to build deposits on a return-on-investment basis would tend to erode their depositor base and they successfully blocked the planning. . . at least, temporarily.

In these instances, the most obvious "losers" are the low income families who are either denied or delayed in their dream for better living conditions.

Priorities of governmental agencies cannot be a concern of this treatise. We can only take the approach of recommending that all possible avenues be explored to find ways to more effectively serve the urgent housing needs of any country with the recognition that the housing finance structure is key to ultimate success.

So what do we do in the face of all these problems? Throw up our hands in despair and do nothing? Of course not. We accept each situation as just one more factor which influences our overall marketing decisions and proceed accordingly.

In spite of its drastic impact on everyday life, the Lebanese had to proceed on the basis that the street fighting would not last forever.

And the same for the low cost funds. . .the Banque d' Habitat couldn't count on them lasting forever either.

To become and remain a meaningful institution, a housing finance bank must develop a broad base of savings customers as well as loan customers.

The problems we encounter along the way are simply challenges and opportunities for creative marketing. The recurring question. . ."How do we help our customers help themselves?"

One of the problems - inaccessibility - is common to all of us. Convenience is the single most important feature given in response to customer surveys in the U.S. as the reason for selecting one financial institution over another.

Consistently, 85% of all persons surveyed list "convenient location" as their primary selection criterion. "Convenience", however, is a relative term. . .a location may be "convenient" due to its proximity to a customer's place of residence or place of employment or because of its convenient access on a route most often traveled.

The perception of "convenience" is difficult to promote in a competitive environment. Your location is either convenient or it's not for each individual prospective customer. Except for certain features of convenience, such as efficient business-by-mail service, there is little you can do in advertising and promotion to change an individual perception.

The solution is then to make certain your service is most convenient, most accessible to most potential customers.

In Beirut, the solution took this form: as long as it is difficult to get the customer to the bank, we would take the bank to the customer.

We accomplished this by planning and promoting a weekly timetable in which 2 representatives of the bank were scheduled to appear at specific locations throughout the city on specific days and times. Commercial banks with area branches cooperated by allocating space for our use. These banks received some promotion benefit through the newspaper publicity of the representatives' schedule. The increase in customer traffic for our services meant more potential business for them as well.

Although the first order of business for these representatives was to solicit and process applications for home construction and improvement loans, they could also have accepted savings deposits had we been ready for it. Perhaps in your own situation, the use of space in an existing bank's branch office may help get your services closer to your customers more quickly, and more economically than by opening your own branch.

Just make sure your potential customers are informed of your grand plan through the use of appropriate promotion media.

The other problem in developing a marketable service is value -perception. What do we offer our potential savings customers? How can we attract their business? What value do these people place on our bank's current services. . .our projected services?

In the case of Lebanon, there remain two important, vital reasons for keeping funds in a bank savings account. One is security. The customer confidence level in Lebanese banks is very high, and the manner in which most banks have performed during the past difficult years shows the confidence well warranted. Millions of Lebanese pounds have been deposited into Beirut banks by the thousands of native Lebanese now employed outside their homeland. This large, skilled work force generates far more income and net savings deposits than the work force within Lebanon.

In most situations where you are serving your savings customers' basic requirement of deposit security, you will accomplish it best through the basic savings instruments. . .Regular Passbook Savings, Extended-Term Certificates of Deposit, and Commercial Savings Accounts.

A regular Passbook Savings Plan is easily promoted and understood, it gives a tangible evidence of account activity and it can be readily converted to electronic operations when the bank reaches that point of growth.

The Time Deposit Certificate allows you to pay higher interest and to direct your promotion to a more affluent audience.

A commercial Savings Plan broadens your appeal to another specific market from which you can attract sizeable deposits.

The second reason why people in most developing countries would open a savings account, and clearly the strongest reason, is to qualify for a loan. A "Forced Account", therefore, should be the first savings plan for your deposit acquisition marketing program.

Each loan applicant should be required to open a savings account to become eligible for a home purchase, construction, or improvement loan. The minimum balance can be established at a level sufficiently low so as not to discourage qualified loan applicants.

The customer would be encouraged but not required to make deposits to the account but would be required to maintain the account (at the minimum balance level established by the bank for all categories of accounts) for the term of the loan, if granted.

In each of the countries in which I have worked, the people hold strong ties to their family units. Responsibility for the well-being of individual members, including financial assistance, is broadly shared among all members regardless of where they may live and work. Down payments for the purchase or construction of housing for the emerging generation largely come from pooled assets of the established generations.

The idea to create a "family savings plan" is based upon that practice. It would allow those pooled assets to generate more housing finance assistance within the family. Instead of using that money as a down payment, anyone wishing to help secure a loan for someone in the family would participate in the plan by opening his own individual savings account. The balance would be designated for use as the basis for providing a loan to one specific member of that family. Total balances in all accounts so recorded would be applied in calculating the amount of the loan to be granted.

The formula for this calculation would be fixed and publicized by the bank. For example, a loan of three times the amount of all appropriately blocked balances could be awarded the applicant (up to the maximum loan figure).

Normal credit review procedures would be followed and the applicant would be granted a loan of 100% of the purchase or construction costs. The family savings funds would serve as collateral and would be required to remain on deposit until the borrower had repaid 25% of the loan principal.

At that time the funds would be unblocked and be allowed to serve as the basis for granting a loan to yet another family member. The funds would earn interest at the appropriate rate for the respective account holders.

Stimulation of deposits beyond those required for obtaining credit is vital to the full-circle concept of savings and loan financial institutions. However, if you can't match your competition dollar for dollar, then you look for excitement and anticipation as elements of a program designed to capture the largest possible quantities of "undirected" savings. There is one basic appeal which can be very effective in attracting sizeable deposits from a large customer base while offering below market rates and terms. The Appeal? GREED!

The chance, the possibility (with reasonable odds) for a customer to get a very high return on his savings dollars can be sufficiently appealing to a large target customer group, as long as there is a "reasonable" normal return on investment.

A lottery process could work well to achieve these conditions. It must, of course, be called by another name so as not to confuse the public nor to upset the national lottery officials if such an organized program already exists. If either were to result, it would doom the program to failure.

The basic recommended design for a lottery-type savings mobilization plan is as follows:

1. Use the name "Bonus Savings Plan".
2. Use only with regular savings accounts, require a minimum opening balance and subsequent minimum deposits of a specified amount, and require a one-week notice for withdrawals.
3. The annual interest rate should be established at a figure 2% lower than competitive bank savings plans to allow for funding of the "bonuses".
4. "Bonuses" will be awarded by two different methods to all eligible customers:

- a. Periodic scheduled drawings of lots will determine which savings account customers will receive a Bonus Award in the form of set percentage of the amount held at the time in their accounts.
- b. Bonus interest will be awarded all customers who meet predetermined criteria.

The plan is designed to encourage the maintenance of large balances and to discourage major withdrawals and/or the closing of accounts after every drawing. To ensure the success of the design, it is necessary to conduct the Bonus Savings Program in the following manner.

1. Allow a "start-up" period of at least three months from the time the public is invited to open Bonus Savings Accounts to the time of the first drawing. This would allow for gradual opening of accounts and a build-up of public awareness of, and excitement for the program. Subsequent drawings should be held as frequently as required to maintain interest in the program, but with no greater frequency than monthly.
2. Bonus Awards might be set at 100% and 10% of the amount held in the account on the date of eligibility, and should be announced in that order in all media. The actual monetary figure should never be announced -- only the percentage. This results in benefits for both the bank and the customer. The bank's program would be enhanced among each class of customer by the cumulative perception of having awarded far greater amounts than the actual value of the prize fund. Each winner can announce to friends whatever sum he wishes; in most cases a percentage figure is self-aggrandizing.
3. The prize fund from which the Bonus Awards are dispensed is determined by computing earnings in all eligible savings deposits, during the period covered by the drawing, at the annual rate of 2% (or whatever figure is decided upon).

The actual amount awarded during each drawing is variable due to the random drawing of a predetermined number of percentage awards. The prize fund is established through computation on average balances, and the individual Bonus Awards are based upon a percentage of existing balances. As insurance against excessive variation, a portion of each prize fund could be held in reserve prior to determining the number of 100% and 10% Bonus Awards for each drawing.

Example:

1,000	accounts
x \$1,000	average daily balances
= \$1,000,000	total average daily balance
x .005	3 month earning rate @ 2% annual rate
= \$5,000	prize fund
- \$ 500	reserve
= \$4,500	net prize fund for 3-month period

Bonus Awards:

1	100% award (estimated average of \$1,000)
35	10% awards (estimated average of \$100)

4. The drawings themselves determine the three factors used to establish the winning accounts and the amounts of each award.
 - a. Date of Eligibility. This can be and must be publicized as being any date from the one following the previous award up to and including the date of the current award. The account balance on the date selected by drawing would be used as the basis for computing the amount of each award.
 - b. Percentage. The 100% winner is drawn first if there is a live or radio audience sharing in the drawing "ceremony". The purpose is to enhance the appreciation for the 10% awards. If done in reverse order, each 10% winner would consider himself a "loser" because he became ineligible for the "grand prize" in that particular drawing. To make winners of as many savings customers as possible, only one 100% prize should be awarded with no 50% or 25% or any other intermediate awards created. The practice of a single "grand prize" also serves to aggrandize the 10% prizes.
 - c. Account Number. Winners are to be announced and published by account number only. Care must be taken to insure accuracy in any newspaper or other publication of winning numbers. The only "official" publication should be prepared for distribution at all offices of the bank. The Bonus Awards are to be added to the respective winning accounts upon presentation of the Passbook (or other official account verifier), with care taken to positively identify each winner. A 30-day (or other) time limit can be imposed to collect the Bonus Award to make sure all accounting is finished prior to the next drawing. All unclaimed awards can revert to the prize fund and announcements should be made to that effect.
5. Bonus Interest should be added at each anniversary date to all non-winning accounts of customers who have made at least two deposits and no withdrawals during the year. The amount should be at least 1% and more if the balance remaining in the prize fund permits a larger amount.

We've talked earlier about marketing communications as a two-way process. It is important to learn as much as you possibly can about the people you wish to serve. Your own knowledge of the target groups should be augmented by on-site research. If no experienced research facilities are available, you must conduct it yourself. Find out, as best you can, as much as you can about the target families. What is their current thinking about the kinds of service you may be offering? What are their current savings habits, spending patterns?

In my work with la Banque Nationale pour l'epargne et le credit in Abidjan, we, fortunately, had access to recent in-depth sociological studies. These were very helpful as it is difficult to use guesswork in developing marketing programs for use in cities with more than a million population, such as was the case in the capitol of the Ivory Coast in 1979.

One important finding of those studies revealed that the savings practice among Ivorien families was very well founded and spread throughout all income levels. Savings account balances averaged 2½ times monthly revenues. At least 20% and as much as 35% of monthly income was set aside as a result of family sacrifices. . .or living without luxuries, even without what most of us would term necessities in order to accumulate the monthly savings deposit. This was being done in a relatively expensive, inflationary economy where fewer than 8% of the Ivorien households had a basic income exceeding \$700 monthly.

Having money saved up for emergency needs accounted for some motivation, but more often, the primary incentive for saving was the desire to obtain credit. As a result, an unproportionally high percentage of liquid savings was in "no-interest checking accounts" in banks home-based in Abidjan. Any enterprising head of household knew that banks looked first (and perhaps only) to this part of the loan application in granting consumer credit. The ONLY perception of a savings account as an investment was in the sense that you had to have it to be able to borrow money which could be invested at a far greater return than a savings account. The Ivoriens are great at "petite commerce" and the majority of households have a piece of some business or another, even though every member of the household has a regular job.

In research on yet a broader scale, the United Nations Development Program has conducted a series of comprehensive studies of Consumer Savings Mobilization within all developing nations. These studies show current and potential savings levels, and the methods each country is using to encourage and capitalize upon this potent internal financial force for development. That effort is well under way in the Ivory Coast. Postal Savings is available throughout the country, bank branches are in all cities, and BNEC, the National Housing Bank, is effectively expanding its services.

BNEC's purpose was two-fold: to financially manage the Housing Assistance Fund (Government tax receipts ear-marked for public low-cost housing); to encourage savings deposits from the private sector and facilitate home ownership through mortgage loans. BNEC began operations with the one office with Teller windows open from 7:45 A.M. until 11:30 A.M. and from 2:45 P.M. until 4:45 P.M., Monday through Friday. (Surveys showed that customers prefer these hours for downtown banks as there seems to be no problem taking time from work for banking but also would like some noon and Saturday morning hours for residential area branches.)

At the time of my arrival to help prepare a marketing program, BNEC was opening an average of 25 new accounts and handling approximately 300 deposit and withdrawal transactions daily. Through the facilities of a competent, creative, local full-service advertising agency, Ivoire Media, a logo/slogan contest was conducted through newspaper ads and posters. \$1,000 First Prize was offered to create interest, and 625 entries were received from throughout the Ivory Coast (with at least one each from neighboring countries of Ghana, Upper Volta, Mali and Liberia). The winning logo design is now being used on all promotion (stacked coins representing a house) as well as the slogan, "la banque qui vous donne des racines" - the bank that gives you roots.

The advertising concept was then decided upon - a simple message to be repeated in all media for the duration of the campaign. In a "slice-of-life" format, it would show two young men with identical jobs and salaries. Jean, a free-spender on the wine, women and disco circuit, who ends up literally in the street. Paul, a sensible saver who, with the aid of BNEC, builds a beautiful home, life, family and retirement. Photographs and copy from the live-action television commercial which portrayed those life stories were used in the newspaper ads and brochures. This 45 second TV spot later won top prize in the International Film Festival competition and won official recognition for properly representing the lives and ideals of the Ivorien people.

The six month campaign began with six weeks of relatively heavy scheduling in newspaper, radio and "Sonobus". This was a unique system of interspersing commercial messages with popular music over loudspeakers inside the commuter buses, a real captive audience. Television and poster advertising did not appear until later in the campaign due to delays in production but that was, in one sense, beneficial as it aided the evaluation of media impact.

And the advertising worked: The results were "textbook classic". In account categories subject to promotion, new Passbook accounts jumped from 500 per month to 725 in January, and well over 1,200 monthly February through May, with average account balances also showing marked increases. In one-year certificate accounts, the percentage increases were even more spectacular than in Passbooks. An average of only 15 accounts were opened prior to the advertising campaign but more than 45 monthly with promotional help. Monthly deposits grew from 5 million CFA to more than 20 million in new certificates alone. The increases in this category were the most pronounced following the addition of television to the campaign schedule. . .again, a textbook result proving the benefits of promotion directed toward the more affluent. In six months, BNEC had doubled their asset size.

In addition to the individual savings accounts, BNEC created a special account which gives rural Ivoriens a practical solution to the housing problems of their entire village. It's called "le Compte Mutuelle". . .a Mutual Savings Account.

Its success requires the cooperation of the young villagers who are now employed in the "big city" and the elders, the village leaders. They pool their resources and establish a savings account at the bank with a fixed loan agreement. The villagers receive a loan to construct permanent homes and community facilities when the balance in their account reaches 10% of the amount required for their construction project.

The savings deposits, though blocked, earn interest all the while and the loan payback begins when construction begins.

This plan is formalized through the establishment of a village committee with elected officers. The appropriate ministry then grants official recognition and tax exempt status.

The average village contains 350 people in 75 households. The contributions from extended family members working in the city, added to the villagers' harvest revenues produced sufficient savings balances for three separate villages to begin construction during the time I spent at the bank.

Advertising and promotion for these Mutual Accounts had only been through word of mouth, but we developed a plan to systematically cover all 26 regions of the Cote d'Ivoire. We used direct mail to reach the District Head of Administration within each region explaining the plan in full detail including our success stories. We also used radio messages to create interest in the program. . .messages which were broadcast in the two native dialects and which were heard by the city dwellers as well as throughout the rural regions of the country.

The Mutual Savings Account Program had far-reaching benefits. In addition to generally improved living conditions in a permanently constructed home, the plan produced a permanent school for the village. This automatically produced a teacher, the result of a promise by the Ivorien Government. A teacher would be supplied to any village which constructed a school built to prescribed standards.

It had obvious benefits for the housing construction laborers and material suppliers which produced a beneficial ripple effect throughout the economy in general.

All in all, the marketing efforts to attract savings deposits from all possible sources worked well for this national housing bank. Much of the success was due to our use of marketing communications as a two-way street. . .we knew a lot about our target audiences before we began our promotions.

Another good example of effective marketing communications comes out of a joint Government of Egypt - Government of U.S. project for upgrading squatter communities near Cairo. In the 18 months I spent on this project, we were approaching the stage of being overwhelmed with facts.

It can happen and it's something which you must guard against. Be careful that you do not spend so much time, effort and money on research that you have nothing left for the actual project.

In this case, we were determining the feasibility of a home improvement lending program to be conducted concurrently with a program to upgrade community facilities. As the beneficiaries did not as yet have legal title to their land and had no tangible evidence that the promised improvements to their communities would soon begin, the results of field surveys indicated a potential lack of positive response to a home improvement loan offer. Especially one without subsidies and in a market where many essential building materials were scarce or available only at excessive cost. An important point here is that the subjects of your survey research must already have a clear perception of the product or service in question. If there's a lack of understanding or elements of confusion, your survey results are all but invalid.

Much of our data was suspect for this very reason, so in spite of the so-called evidence and contrary to some logical arguments, it was decided that the all around best way to determine customer response, was to make the offer available to them.

The point to remember is that there is so much vitality, so much strength of character, so much will to survive and succeed among all groups of people when it comes to improvement of family lifestyle, that, so often, all that is required is an organized method to supply the means for success.

We did just that, applying the energies of many people, especially those of the Credit Foncier Egyptian, the National Real Estate Bank. We began a market test. . .a pilot project to test the mechanism of our home improvement loan program within two of the seven communities. Funds were to be made immediately available to qualified low income heads of households. A temporary office was set up in a community center area. Our promotion consisted of a series of evening meetings in the communities and nearby factories, plus word-of-mouth which quickly spread our story to every potential customer.

The bank had to add more people to handle the first day's rush of business. The actual response from our target market, proved several things. Number one, we were right to distrust the survey results. Number two, it is best to expose your potential customer to the actual product or service to accurately gauge response, Number three, a test program lets you learn a program's shortcomings and make the necessary refinements before launching a full-scale program.

Another point to remember is that all programs need to be modified as necessary to reflect the current state of events. For example, the concept of "borrowing short and lending long" worked so well for many years for the savings and loan industry in the United States. Millions of homes were purchased with 20 to 30 year fixed interest rate mortgages. .billions of dollars in short term savings accounts made up those loans.

As you are aware, the problems of recent inflation have caused the U.S. financial industry to revise that concept and to build the right of future rate adjustments into all their long term loans. This practice should be a part of all long term housing finance programs in the developing countries, as well, because you cannot even count on the majority of those loans "turning over" as was the case in the U.S. The average mortgage in the states had a life of less than 7½ years because so many people moved their place of residence, sold their homes and, in most cases, created new loans. |

Inflation has also caused considerable changes in the savings habits of U.S. families. This has brought about a different approach to marketing savings services. A good example of this new sophistication comes from the large California Bank, Crocker National.

You may not think that a fuzzy, cute animal toy is an expression of sophistication, but in the case of Crocker National Bank, it was a gift offered to new savings customers as a result of careful, sophisticated market planning.

The selection of a gift which had universal appeal but which was most likely to be chosen for their children or grandchildren by older and, therefore, more affluent and longer term customers proved very effective for Crocker Bank. 80% of the new savings deposits and savings customers, remained with the Bank after one year, even though there were no such restrictions on the term of the offer. The name recognition for the bank was further enhanced in the promotion because of the lovable dog toy which was made to look like a breed called "Cocker Spaniel", was appropriately called a . . "Crocker Spaniel".

Last fall, a new savings instrument came on the scene in the U.S. called an All Savers Certificate featuring tax-free earnings. This was an attempt by Congress to help stimulate the U.S. housing industry. All financial institutions offering this Certificate had to pledge at least 75% of the resulting deposits to home construction or purchase lending.

As the All Savers Certificate would be offered by all banks, savings and loan associations and credit unions, each financial institution tried to gain extra share of market through special promotions. Here again, Crocker Bank, pushing name awareness, offered a new premium for opening accounts. . .the "Animal Crockers". How we love our plays on words.

A service which had tremendous impact on the financial community did not even come from a bank or savings and loan. Money Market Mutual Funds, through investment brokerage houses, siphoned off large amounts of savings dollars across the country. Congress has just changed regulations, allowing the major financial institutions to compete directly and offer high, daily rates with full liquidity in money market related investment accounts with high minimum balances.

As a stark contrast to the cuddly animal toys, Crocker Bank went to a "hard-sell" approach in the introduction of their Working Capital Account to the serious investor.. Advertising for savings through offering a cute gift, is what we call a "soft-sell" advertising approach. You rely on making sure your customers like the gift you're offering, recognize the name of your bank, understand your services, and think of you in a friendly manner.

In the "hard-sell" approach, you go directly to a full and detailed explanation of your offer, present all the facts, advantages and even disadvantages of your service. You also pinpoint your message to the specific target group.

The "hard-sell" approach carries over to the name of the service. In this case, the Crocker Bank Working Capital Account, instead of a \$500 minimum, requires a \$20,000 opening deposit which can be a combination of cash, stocks and bonds. Instead of a simple savings deposit, you now have an account which provides you with all these activities. .your cash on deposit earns money market rates, as do the dividends on stock and interest on bonds, which are automatically deposited to your account. You may write checks on the balance or use your VISA Debit Card for access. You can buy and sell stocks and bonds through your account with reduced commissions. You can get secured and unsecured lines of credit and you get a comprehensive statement in the mail each month, which provides a detailed status report of all the activities.

Well, I am sorry. I promised you a relaxing look at the opportunities for savings mobilization but all that, just made me tired. I guess it proves that Times are Changing. .but the basic concept has not changed. Find a Need and Fill It!

The way to successfully mobilize savings deposits is still based upon the simple premise that you find out what your potential customers want, need or can use in the way of financial services (and what they will pay for). .and then set out to develop ways to provide those services on a mutually beneficial basis.

"Help us help ourselves" is the message your customers are giving you. . . . that is your challenge, your opportunity.

GOVERNMENT AS CATALYST IN THE HOUSING SECTOR OF
DEVELOPING COUNTRIES: OLD AND NEW ROLES

by

Raymond J. Struyk

November 1982

PREFACE

This paper was prepared under a compressed time schedule for presentation at the 1982 Shelter Training Workshop sponsored by the Office of Housing and Urban Development of the Agency for International Development. While written to be self-contained, it is complemented by a paper by Elaine Weis and Richard Pratt, "Housing Finances in Developing Countries," which was prepared for an earlier workshop.

The paper has benefitted from a discussion with Fredrik Hansen and Ed Robbins, and comments from John Tuccillo and Jack Goodman.

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I. OBJECTIVES OF HOUSING POLICY

The broad purpose of government initiatives in the housing area is ultimately to raise the level of housing consumption of all families to some minimum level without their having to spend an extraordinary share of their incomes on housing. Countries likewise, however, adopt a number of specific objectives to be attained in the housing sector, each of which is consistent with achieving the broader objective. For example, homeownership (with secure title) is thought to encourage greater housing investments. Table 1 lists a set of objectives of housing policy common to many countries; it also includes several programmatic tools used by governments in pursuing each objective. The objectives may range from increasing residential construction to actually encouraging homeownership among a specific group of the population. Equally wide-ranging are the programmatic tools that can be used. These may include direct government subsidies, regulation of financial institutions to establish mortgage and deposit interest rates and various tax policies.^{1,*}

One implication of this multiplicity of objectives combined with limited government budgets is that trade-offs are inevitably required. Government regulations and exemption from taxes are often easier for legislatures to adopt than it is for them to actually appropriate funds for subsidies. Thus, the objectives receiving greater resources are those which can be addressed through regulations and tax expenditures. This in turn means that various objectives are achieved at different rates. For example, the homeownership rate may rise among middle-income families thanks to lower mortgage interest rates at thrift institutions which have been achieved through regulated interest rates on deposits; but little progress may be made in improving the housing situation of lower income families which would have required actual government expenditures.

The entries in Table 1 also highlight the two attributes of housing which together distinguish it from other goods. First, the high capital content of dwellings has typically meant that households must accumulate funds over an extended period to be able to afford them. This has forged a symbiotic relationship between housing in the formal sector and financial markets, and often makes progress in housing contingent on mobilization of long-term capital. Families operating in the informal sector are, by contrast, dependent on intra-family borrowing, savings, and some short-term borrowing in the "curb market" for financing. Second, in urban areas every dwelling exists in a neighborhood. This simple fact ties the value of a unit to the

1. For a further discussion of many of these objectives, see Levine (1978).

*The complete references for papers cited are listed at the end of the paper.

TABLE 1

OBJECTIVES OF HOUSING POLICY AND ASSOCIATED PROGRAMS

<u>Objective</u>	<u>Programmatic Tool</u>
Ensuring availability of adequate and affordable housing, especially to low-income households.	Interest rate, demand, and tax subsidies for construction of new units; government-provided below-market financing for new units; subsidies to households for leasing existing units meeting minimum standards; direct government development of new housing for sale or lease to lower income families.
Increasing residential construction; reducing cyclical instability in the construction industry.	Interest rate reductions for purchase of new homes in periods of high interest rates; variety of credit institution regulations; construction of government-sponsored housing.
Increasing availability of mortgage credit.	Mortgage insurance; purchases of mortgages by government or quasi-government agencies; tax and regulatory advantages to mortgage originating institutions; clarification of land titles.
Encouraging homeownership.	Interest rate subsidies; mortgage insurance; regulation of financial institutions.
Encouraging neighborhood upgrading.	Upgrading of infrastructure charging rates below marginal cost; subsidies for housing rehabilitation; clarification of land titles.

condition of the neighboring ones and the availability of utility services. Because a household cannot independently arrange for most types of infrastructure--public roads, storm sewers, water supply--the value of each property is largely determined by the provision of key services by local government.

The foregoing facts are critical background for the development of a housing strategy and a discussion of the corresponding programmatic options. This paper concentrates on the tools of housing finance policy: first the traditional subsidy options employed by governments, and later a set of facilitating actions which governments have more recently begun to undertake to encourage the production of housing. The facilitating actions are attractive because of their low cost and because they are realistic options that permit assistance to more households by the majority of governments whose housing budgets are meager compared to the problems they face.

The remainder of the paper is organized into three sections. The next section briefly states several criteria for judging the efficacy of housing programs. These criteria are used repeatedly in the succeeding sections. The two sections that follow describe and evaluate specific housing subsidy options and a selection of facilitating government actions.

II. CRITERIA

This section identifies five criteria against which government intervention in housing--either through housing finance programs or through other vehicles--can be judged.

A. Increased Output

The first criterion is central to policy decisions in most developing countries. It asks whether or not the program increases the supply of acceptable housing. Rapid urbanization in many countries has resulted in major problems for production of a sufficient quantity of new dwellings, especially for lower income households.¹ Under these circumstances, government programs should probably be concentrated on additions to the housing stock--either from new construction or from upgrading existing units.

So, for example, government may choose to allocate subsidized mortgages almost exclusively to households purchasing new units of modest value or to those upgrading slum housing. Those purchasing existing units would receive a lower priority.

1. For basic figures on the rate of urbanization in developing countries, see Renaud (1979), chapter 2.

B. Efficiency

The second criterion is efficiency, which in this context has several meanings. Foremost, efficiency means that the total cost of producing the flow of housing services should be as low as possible. Thus, if it costs the government more (including administrative cost) to build and operate housing than it does for private sector developers, government policy should stimulate private sector action.

Second, a program should be designed so as to permit as little substitution of government for private resources as possible. Of course, governments vary dramatically in the range of tasks they have assigned themselves. Some, for example, operate utilities. It is within these parameters that this criterion applies. Thus, builders should receive subsidies only to undertake building they would not have done otherwise. Likewise, government provision of services, such as piped water supply, that households cannot easily provide themselves, is preferred to help with upgrading the structure which is under the household's control. If this criterion is followed successfully, the cost to the government per unit is as low as possible, implying the maximum leveraging of government resources.

An example from the use of tax policy will illustrate this point. Some governments grant families certain deductions from income taxes for expenses associated with homeownership--mortgage interest and depreciation allowances are common. Likewise, local governments grant property tax abatements for dwelling improvements. In both cases, the tax relief is granted on a very broad basis, and many receive relief who would have done what the government is encouraging them to do--become homeowners or improve their properties--without the inducement. Governments in this instance are not doing well in leveraging their funds.

A related illustration is available from the regulatory area. By imposing regulations that keep interest rates paid by thrift institutions on time deposits below market levels, the mortgage interest rate is kept at a corresponding lower level. All mortgagors receive the lower rate, including many persons who would have been able to purchase a home at market rates. In this instance, government is doing a poor job of using the funds generated by implicitly taxing depositors by imposing below-market interest rate ceilings.

C. Equity

Actually, two forms of equity are involved under this criterion. The first rule is that similar households should be treated in the same way by government. Logically, this means that otherwise similar households should pay the same taxes and receive equal benefit from the subsidies. For example, although it would not be possible for most countries to subsidize the housing consumption of all low-income households, the programs should be structured so that the generosity or depth of the

subsidy and the definition of eligible households can be varied to move toward this goal. Thus, less expensive approaches (per unit) that help more households eventually obtain minimum standard housing should be preferred to more costly ones that realize or surpass the objective immediately but for a small percentage of the target population.

The second equity criterion is that greater assistance should be received by lower income households. This idea is often taken for granted in principle but violated in practice, as when higher income households are given access to larger subsidies on mortgage loans than are available to lower income families.

Equity problems are particularly evident in the operation of the housing funds of some countries. Typically, a fund to finance mortgages is generated through a payroll tax, often with a maximum annual contribution specified. The funds are used to finance mortgage loans for contributors. However, because of the underwriting standards adopted (either by the fund managers or the banks who originate loans on behalf of the fund) and/or the type of housing sponsored by the fund, only the highest income contributors are eligible for loans. This structure clearly violates the idea of providing greater assistance to lower income households. Moreover, in cases where the interest rates charged on the mortgages actually made are very low, the operation of the fund also violates the first equity criterion by concentrating benefits on only a few families.

D. Target Efficiency

The fourth criterion is a particular blend of equity and efficiency, target efficiency, which can be defined as assuring that the maximum number of households that were intended to receive benefits actually receive them. Often programs are aimed at lower income households, for example, but in fact benefit those with higher incomes. This is especially true, for example, of subsidized mortgage programs that limit the value of the mortgage but not the value of the property. Thus a higher income household secures a subsidized mortgage and adds a market-rate mortgage to it to finance a very attractive home. But the subsidies were designed to go for modest units owned by middle class families.

E. Administrative Simplicity

The fifth criterion is that the programs should be administratively simple. Successful program implementation in many developing countries faces a dual constraint: financial resources and administrative capacity. The administrative constraint can be as binding as the financial. Limited administrative capacity can easily be squandered on a few "over designed" programs. More complicated programs also have the defect that they tend to become the purview of a few insiders who understand their workings, thus often channeling benefits to a few persons. Additionally, administrative complexity often results in high costs in time and money to those who participate. A classic example here is the

loss suffered by a developer who has invested in sites while he waits for his plans to be approved by the cognizant government agency. Finally, the program must be administratively feasible: if income verification is essentially impossible in a society, programs that are explicitly conditioned on knowledge of a household's income will not be feasible.

III. HOUSING SUBSIDIES

As suggested in the introductory paragraphs, governments can subsidize housing in a variety of ways. Table 2 lists about a dozen common types of subsidies; dozens of other subsidy arrangements exist, but this listing provides a good indication of the possibilities. The subsidies have been divided between demand and supply subsidies, i.e., those received from the government by households and by developers or builders. In this section three of these traditional subsidy programs are explicitly discussed: mortgage interest subsidies to households, subsidized construction-period loans to developers, and the rental of dwellings constructed by the government at below-cost to low-income families. Preceding this, however, it is essential to turn briefly to incidence of the benefits from subsidies.

A. Who Benefits?

As noted above, Table 2 identifies the recipient of various types of subsidies. These are the persons who nominally receive the benefit of the subsidy. Yet, because of the way the housing market operates, they might not be the ultimate beneficiaries. Consider the following example. The government is providing subsidized mortgage loans for houses with a value not exceeding a specified amount. Developers respond by building units that sell for this price. The price, though, contains a profit margin sufficient to capture much of the capitalized value of the interest subsidy. In this instance, the developer is the ultimate beneficiary for most of the subsidy. The likelihood of this occurring is greater in situations in which the supply of units is limited and the number of developers offering such units is small. While strict oversight by government can limit these tendencies, it will not eliminate them.

The difference between nominal and actual beneficiaries is important to assessment of the performance of a program. In general, the greater the extent of competition, the greater the coincidence between the intended and actual beneficiaries. Hence, an additional consideration in designing programs is to assess the degree of competition and take action to increase it where necessary. One example might be for government to provide construction-period financing to small builders rather than large contractors to make it possible for more firms to compete.

TABLE 2

COMMON HOUSING SUBSIDIES

Demand subsidies--received by households

Mortgage interest subsidies to households
 Contribution of low- or zero-interest capital by government
 to public financial institutions to use in making
 mortgage loans
 Special regulation of thrift institutions, permitting lower
 mortgage interest rates (e.g., lower reserve requirements)
 Purchase price or rent reductions on government-constructed
 units
 Provision of infrastructure at rates set at the systemwide
 average instead of reflecting marginal costs
 Grants for dwelling purchase or upgrading
 Forgiveness of property taxes on improvements to owner-
 occupied dwellings

Supply subsidies--received by developers

Interest subsidies on construction-period loans
 Write-down of land costs (or use of government powers in
 land assembly)^a
 Subsidies on materials to producers
 Reduction or elimination of import duties on key building
 materials
 Provision of infrastructure in housing developments at
 less-than-cost or market value^a

^aIt is possible for these subsidies to be made directly by government to households.

B. Interest Subsidies

To increase the affordability of housing, government can write down interest rates to homeowners, to owners of rental housing, and to developers in order to lower the cost of housing to the ultimate occupants. The examples used here concern a sites and services project in which plots are to be sold to individual owners. The first panel of Table 3 provides a general description of our sites and services project. The lower two panels give information on the two alternative subsidy schemes discussed here: interest subsidies to households, or construction-period interest subsidies to developers.

We begin with the mortgage interest subsidy. The price of the unit is 20,000, and the maximum loan amount is 16,000. The mortgage offered is the standard, fixed interest rate type with a 20-year term. The government is subsidizing a six percentage point difference between the market and project rates (18 vs. 12 percent), which reduces the loan payment by 71 per month. This, in turn, lowers the minimum income of purchasers by 29 percent (from 1,235 to 880 monthly), assuming no more than 20 percent of income is devoted to mortgage payments.

How does this program measure up against our criteria of adding units, efficiency, equity, target efficiency and administrative simplicity? Beginning with target efficiency, it gets high marks. Higher income households are fairly unlikely to move into a sites and services project. There are exceptions, of course, in cases of severe shortages of serviced lots where those with higher incomes purchase a lot and proceed immediately to construct a relatively high-quality dwelling on it. But overall it does well both in target efficiency and in adding units to the housing stock.

The general efficiency of the approach--especially on administrative grounds--is open to some question. One issue is whether or not the uniform 6 percent interest subsidy should be given to all households; a lower subsidy for households at higher income levels may be appropriate.¹ A second issue concerns the form of the subsidy. Specifically, the final entry in the center panel shows that the same reduction in monthly payments could have been accomplished with a front-end grant of 4,500 at the time of purchase. Such a grant has the virtue of largely ending the government's role after sale of the unit; the mortgage can be serviced by a financial institution. This removes government from the often onerous task of acting on delinquencies. Likewise, the government's burden of making periodic payments to the bank on behalf of each household vanishes.

At the same time, the grant option can introduce problems of its own. Most obviously, government must guard against the quick sale of

1. This assumes that accurate verification of incomes is feasible.

TABLE 3

INTEREST SUBSIDIES

Overall Project Description

Project type: sites and services
 Number of units: 250
 Description: Lots 200m², properly graded; initial structure is sanitary core plus unroofed 9m² room. Infrastructure: gravel streets, water standpipe at 100m intervals, storm sewers, sites for schools, etc.
 Developer: private entrepreneur
 Full unit cost (incl. producer profit): 20,000
 Development period loan: 4,500,000
 ([250 * 18,000/unit]; producer profit is 11.1 percent)

Option 1: Subsidy on Mortgage Interest to Household

Value of unit (purchase price): 20,000
 Maximum loan amount: 16,000
 Type of mortgage: standard, fixed rate
 Loan term: 20 years
 Market interest rate: 18 percent
 Subsidized interest rate: 12 percent
 Reduction in loan payment (subsidy): 71.

Minimum monthly income of household to qualify for loan, assuming 20 percent of gross income goes to mortgage payments:
 --market interest rate: 1,235
 --subsidized interest rate: 880

Reduction in purchase price needed to produce same reduction in monthly payments as the interest subsidy: 4,500 (i.e., loan value is 11,500)

Option 2: Subsidy on Development-Period Loan

Value of completed project as appraised: 5,000,000
 Amount of loan: 4,000,000
 Loan term: One year
 Market interest rate: 22 percent
 Subsidized interest rate: 15 percent
 Value of subsidy--total: 280,000 Per unit: 1,120
 Total cost per unit--with subsidy: 18,880
 without subsidy: 20,000

units by the subsidy recipient to convert the large up-front subsidy into cash. The major problem with the grant option, however, is the first-year cost to the government: in the first year the mortgage interest subsidy is only 852 (i.e., 71×12) per unit vs. the 4,500 grant. On the other hand, as Weis and Pratt (1981, pp. 46-49) demonstrate in their 1981 workshop paper, if the program is to continue to assist additional units year after year, then in a few years the annual government expenditures for mortgage interest subsidies for all units being subsidized will be greater than that year's cost for the one-time payments on newly assisted units. In other words, if we assume a few years of steady program growth, then at the end of this period the government's expenditures would be smaller and its total future financial commitment tiny under the up-front subsidy scheme.¹ Thus, impact of the first-year expenditures of a grant scheme should not be overemphasized.

The interest subsidy program as designed has an equity problem caused by the lack of any subsidy recovery. Although the development of the project itself may pay for itself, the government subsidy to the household is never even partially recaptured. Since it is doubtful that government will ever be able to provide such subsidies to more than a minority of "income eligible" households, it will never achieve its equity objective. Some form of subsidy recovery would further the attempts to achieve the objective by permitting more families to eventually receive assistance. Again, however, there is a cost in administrative complexity and burden that might be too great. Nevertheless, some recovery of subsidies at the time of sale of the property can be explicitly considered at the design stage.

An alternative approach to lowering the prices faced by purchasers is to subsidize the interest rate paid by developers on construction-period financing. The final panel of Table 3 shows that a seven percentage point subsidy (from 22 to 15 percent) cuts the purchase price of each unit by about 1,100, or 6 percent of the after-subsidy price. Thus it achieves a modest price reduction. It also has the advantage that the government's involvement in the project is strictly limited.

As a program, it is somewhat more difficult to analyze than the similar assistance given to households, even if we assume that the value of the subsidy is passed through to the purchasers. The question of incremental new building is especially troublesome. Did the subsidy result in more units being built than otherwise would have been the case? Or, on efficiency grounds, did the subsidy cause new firms to enter this portion of the market and thus increase competition? If one cannot answer these questions affirmatively with confidence, then the case for the approach is limited, particularly in light of the greater

1. More correctly, these calculations should be done at the time the decision is made with the costs of the two options calculated on a discounted present-value basis. A very high discount rate could well offset the advantage of front-end grants suggested in the text.

likelihood of the benefits ultimately accruing to the developer. As to targeting, efficiency here depends on the restrictions, if any, the government places on who can purchase a unit. As noted earlier, though, targeting is generally good for sites and services projects.

Lastly, the program has the advantage of being administratively simple. The agency is involved only until the units are sold. The principle tasks are in developer selection and in monitoring the quality of construction. The financial transactions are limited to a few payments to the bank for the interest write-down.

C. Government As Landlord

Governments in many countries have been tempted to aid their low-income populations in obtaining decent housing by building apartment blocks and then renting the units to households; indeed, a surprisingly large number have chosen this course.¹ Rents often are set with reference to each family's income. Table 4 describes the hypothetical project to be used for this discussion. The income of the "target household" is the same as that used in the example of the mortgage interest subsidy, 880 per month. Under the assumption that the completed flats cost about 2.5 times as the serviced site, and that tenants pay a quarter of their incomes for rent, the monthly subsidy is 613, if the government's borrowing rate is used in the calculation. This is an enormous amount, equivalent to about 70 percent of the target family's monthly income.

Judged against our criteria, the greatest weakness of this approach is in the equity area and stems from the high cost per unit and the impossibility of approaching recovery of the investment. Hence, under any realistic set of budget assumptions and assuming efficient production, the program engenders the most severe type of inequities: vast subsidies to a very few. Administratively, such programs are also often a nightmare. The administrative tasks include not only project development but also managing the estates, with all of the problems this can entail.²

The score on efficiency is less clear. Many governments have poor records as efficient housing developers. Cumbersome administrative procedures, sometimes combined with limited experience, raise the cost of the completed units above the cost experienced by private developer.³ There are, however, some notable exceptions, including the highly efficient Korea National Housing Corporation.⁴

1. See Hardoy and Satterthwaite (1981).

2. Problems plague publicly operated housing in developed countries as well. For a description of the situation in the United States, see Struyk (1980).

3. See, for example, Mayo (1979).

4. KNHC has obtained a good share of its efficiency by using industrialized techniques on a very high volume of units over a number of years.

TABLE 4.

PUBLICLY DEVELOPED RENTAL HOUSING

Project type: low-rise walkup apartments
 Number of units: 500
 Description: Completed units with full infrastructure
 provided. Unit sizes vary; assigned to tenants
 on basis of family size.
 Developer: government, with private general contractor.

 Full unit cost: 55,000 average

 Total monthly cost:
 At government borrowing rate of 15 percent:^a 833
 At market borrowing rate of 18 percent: 975

 Monthly income of average target household: 880

 Monthly subsidy to household (subsidy = total monthly
 cost - .25 income):
 At government rate: 613
 At market rate: 755

^aAssumes 100 percent financing with 20-year mortgage, and operating costs at 15 percent of mortgage costs.

Regarding additions to the housing stock, it seems likely that the units built by the government for occupancy by lower income households represent a net addition to the acceptable housing stock. Few families in the targeted income group would have purchased a new unit or brought an existing unit up to the minimum standard without some type of subsidy. Still, the incremental cost to the government is extremely high; thus fewer units are added than is possible with other approaches. For the subsidy of each rental unit in this example, 8.6 sites and services participants could have the 6 percent mortgage interest subsidy. Even if half of the families in the sites and services project would have constructed a unit meeting minimum standards without the subsidy, the case is overwhelmingly against building rental housing to be subsidized as described in this example.

IV. GOVERNMENT AS FACILITATOR

The theme of this part of the presentation is that governments have numerous ways to facilitate and encourage the construction or upgrading of housing that involve the creation or redefinition of incentives or the removal of formidable obstacles faced by developers and homeowners. Moreover, these powers can be used to organize the market, that is to induce developers to build dwellings or prepare serviced sites that are affordable by households at various positions in the country's income distribution. This "building to meet demand," as opposed to erecting housing that must be subsidized in order to be occupied by lower income households, is an essential element in the housing strategies because of the limited governmental resources that can be allocated to the housing sector.¹ Where government wishes to do so, it can add subsidies to reach even farther down in the income distribution.

These ideas are not new. What is new, however, is the increased willingness of governments to see themselves in this role. Also new is the extent of use of and experimentation with these approaches.

In this part, we describe four from a host of facilitating actions by governments:²

- o guaranteeing the availability of long-term mortgage financing for completed projects;
- o the provision of construction-period capital to producers;

1. This proposition is articulately stated in A. Churchill with M. Lycette (1980), pp. 4-5.

2. A longer list of possible actions by governments is given in Weis and Pratt (1981), pp. 44-45. The discussion in Weis-Pratt concentrates on innovative approaches to housing finance.

- o financing the provision of infrastructure to existing neighborhoods; and
- o assisting in the assembling of sites for residential development.

Common to all of these actions is that they effectively involve at least implicit but more often explicit cooperation between government and financial institutions, private developers, builders, or property owners. Another common feature is that there is little in the way of cash outlays by government. Likewise, the subsidies involved --such as the implicit subsidy involved in a government guarantee--are small compared to those discussed in the previous section.

A. Guaranteeing Take-out Financing

The construction of housing or the development of sites on a speculative basis is often thought to be excessively risky in the absence of committed long-term mortgage financing for the completed product. Financial institutions have been unwilling to provide such advanced commitments because of concerns about the credit-worthiness of applicants and, in some instances, because of uncertainty about a possible rise in interest rates during the development period which may exacerbate marketing problems. These worries are greater if the project is being developed for lower income families. Under these conditions, little speculative building occurs, and that which is undertaken is focused on the safer, higher income segment of the market. Hence, the supply of new housing lags considerably below the amount for which there is effective demand.

There are two complementary actions which the government can undertake to dramatically reduce the risk faced by speculative builders. First, it can insure against default mortgages that meet the insuring agency's underwriting standards. This lowers the risk to the financial institution of dealing with what it may perceive to be marginal borrowers, but who are judged to be reasonable risks by the insuring agency.¹ Second, it can insulate the thrift institution and the developer from the risk that rising interest rates will choke off the demand for the finished units by guaranteeing a certain rate; i.e., by agreeing to pay the difference between the market rate at the time the project is completed and the guaranteed rate for a three- to five-year period. Thus, the government's exposure would be clearly limited, but the subsidy would provide the time necessary for growth in household income to permit the borrower to handle the payments.

1. The presumption here is that the insuring agency's standards deal sympathetically with second and third incomes, intrafamily transfers, and other income issues that affect credit-worthiness of lower income mortgagors.

While guarantees of the type just noted may be sufficient in some countries, in others the unattractiveness of long-term commitments to many financial institutions may mean that mortgage guarantees will only be forthcoming if the institution can in turn sell its mortgages in a secondary market or to a government agency that is willing to hold this paper. This is essentially the situation in the Philippines, where a secondary market institution has been established--the National Home Mortgage Finance Corporation--which enters into loan purchase agreements with financial institutions.

The government can use the power afforded it by offering these guarantees to channel new construction to different segments of the market. It could make such guarantees available only for dwellings or sites and services projects with a value (sales price) that did not exceed some maximum limit it establishes. To take advantage of these guarantees, then, developers would have to build units selling under this maximum. Given the correspondence between housing values and incomes, speculative building could be focused to lower income households.¹

An example of the interest rate guarantee in operation is given in Table 5. The example here builds on that presented in Table 3. In this case, interest rates rise by three percentage points during the development period, and the agency has agreed prior to construction to cover the difference for a five-year period. The household receives an 18 percent loan, but the agency pays the five-year interest differential to the mortgagee in a lump sum. The agency's commitment is 2,700 per unit on a mortgage of 16,000. Assuming that the country experiences a 6 percent annual inflation rate, the purchasing family's ratio of mortgage payments-to-income is essentially the same in year six after it shifts to the market interest rate in effect at the time the unit was purchased.

It is important to emphasize that in most cases, the subsidy feature of the guarantee would not be used, because interest rates would not rise. Thus, the per unit-cost of the guarantee is lower than the substantial 2,700 figure shown in the table. If one project in five used the subsidy feature of the guarantee, with a three percentage point interest differential, the average per unit-cost would be 540, or 2.7 percent of the purchase price. Government costs could be further reduced by charging a small premium for the guarantee.

This approach receives fairly high marks when evaluated against the criteria outlined earlier. Most importantly, the program is highly efficient: government funds are greatly leveraged, and the government's total exposure is limited. This in a sense is the classic use of a subsidy--to stimulate private action only to the degree necessary. By keeping maximum house values low, reasonable targeting can be achieved.

1. The NHMFC thus far has set its home purchase price at a level affordable by only 20 percent of the population. For details, see Joshi et al. (1982).

TABLE 5

GUARANTEED TAKE-OUT FINANCING

Project type: sites and services
(described in Table 3)

Total unit cost: 20,000

Loan amount: 16,000

Interest rate at time of commitment: 15 percent

Interest rate at time of sale: 18 percent

Purchasing family's income:

at time of purchase: 1,235

after five years, assuming 6 percent

inflation rate: 1,559

Guaranteeing agency's total commitment: 2,700

Purchasing family's ratio of mortgage
payment-to-income:

at time of purchase: .17 (211/1,235)

in year six: .16 (245/1,559)

The greater the targeting, the greater is the likelihood that the units built represent net increments to the housing stock that would not have otherwise occurred.

Administratively, the system is quite simple once it has been established, but the effort required to establish an operationally efficient mortgage insurance agency and to pioneer the interest rate guarantees can be very substantial indeed. The efficacy of guaranteed mortgage financing is evident in countries like the Philippines, where several institutions have encouraged housing production by assuring mortgage financing. Developers have built to the agencies' specifications with alacrity, and the lack of additional mortgage financing has been the only impediment to the development of a very great volume of units on this basis.

B. Development Period Capital

A commonly heard complaint from builders in developing countries is the difficulty of securing development period financing from commercial banks or other financial institutions. The problem is particularly acute for the small contractor with limited assets who builds or upgrades one or two houses at a time. Banks are discouraged from making such loans, in part by the need for specialized expertise to evaluate a type of loan that would never amount to more than a limited share of its total portfolio. Banks are also put off by the potential riskiness of such loans. The risk perceived is not so much one of outright default--although for small developers, this is plainly a consideration--as it is of delinquency, i.e., delayed repayment caused by unforeseen delays in completing the project and selling the units. Even if full interest payments are eventually obtained, bankers are dissatisfied with being unable to plan and commit the next use of these funds with confidence. Developers and small contractors who are at the mercy of planning offices and building inspectors for approvals, not to mention utility firms for the hook-ups required before units can be sold, can have especially severe problems in confidently forecasting when repayment will actually occur.

In such circumstances, large developers either finance internally or arrange a "preferred client" loan with their banker. The second alternative is more common when the parent firm is diversified out of real estate and does other business with the bank. Small firms, by contrast, do without these loans, depending instead on a combination of large advance payments from purchasers, obtaining short-period loans from materials suppliers, and borrowing funds from family members or in the informal market. Whatever the arrangements, they are inefficient and impede the construction of housing on a speculative basis.

The most fundamental solution to the uncertainty problem likely lies within government itself: streamlining and regularizing the approvals process, more efficiently planning and developing increased

utilities capacity to service new developments, and adhering to schedules for providing the actual utility hook-ups to the developments. In many countries, the administrative capacity, energy, and will for improvement at a sufficiently high level are lacking. Nevertheless, this is a central element in the solution.

There are at least two other actions that governments might take. First, they could insure or guarantee development-period loans against default. However, since the greater problem is from delayed repayment rather than outright default, for the insurance to be effective, the insuring agency would have to make payments very quickly after the end of the loan period contracted for by the developer. Insurance alone, however, may be insufficient initially to interest banks. Under such circumstances, the second option of a government-associated bank (e.g., an industrial development bank) making market-rate loans directly to developers could be explored. An advantage to this approach is that it could assure access to loans by the small firms, as well as the large, since even with insurance banks may not want to incur the cost of making small development-period loans. It is quite likely that after the demonstration by the government bank, private banks might take a more active role--especially since the necessary trained staff could be hired from the government-associated bank.

This type of government intervention fares well when judged against our criteria. There will be modest efficiency gains (i.e., lower price per unit) from a steady flow of construction activity compared to a pattern of fits and starts. There is little cost to the government, if the loans are made at market rates and actuarially sound insurance premiums charged. The insuring operation, once in place, would be reasonably straightforward administratively.

One example of an attempt in this area has been the guarantees of development loans provided by the Housing Finance Corporation of the Philippines. These guarantees have not had an appreciable effect because they are quite weak; in effect, they require the bank to take the property used as collateral as partial payment in the case of default. In addition, insured loans are subject to maximum interest limits. Under such conditions, only the least risky, largest firms receive loans.¹ With the basic guaranteeing machinery in place, upgrading the quality of the guarantee and removing the interest ceiling might make a considerable difference.

C. Financing Infrastructure in Existing Areas

It was noted in the introduction that units meeting the minimum quality standards can be created through new construction or upgrading existing units. The potential role of upgrading existing housing as a major element in a country's strategy to increase the share of dwellings

1. Joshi et al. (1982), pp. 66-67 and 92-94.

that meet certain minimum standards has become increasingly widely appreciated in recent years.¹ Its low cost compared to much new development is especially attractive.² From a series of projects in a number of countries, we know that upgrading a neighborhood's infrastructure--providing piped water, storm sewers, and adequate human and solid waste collection--can have a dramatic stimulative effect on owners' decisions to invest in their properties. Perhaps the most widely-known example is the Tondo-Foreshore project in metropolitan Manila, where infrastructure upgrading was combined with providing clear land titles to owners. Strassman (1980) has also documented this pattern for Cartagena, Columbia.

It is certainly logical for government to encourage dwelling upgrading through the provision of infrastructure rather than through, for example, loans or grants to households to improve their dwellings.³ Individual households can provide their own infrastructure services only with great difficulty (e.g., drilling a well to obtain piped water). Likewise, because a unit's value is determined by the value of the structure, as well as the condition of the neighborhood in which it is located, it follows that substantial appreciation will accompany upgrading of the infrastructure.

Despite the investment generation effects of providing services, the question of cost recovery must be addressed because of the impact of the answer on ultimate equity of the approach: from a limited budget, is it to be upgrading for the few or for many? In fact, cost recovery appears to be feasible, although administrative limitations may well again be a limiting factor. In particular, cost recovery is closely related to mortgage financing.

If land titles are regularized or legal long-term leaseholds granted as part of the overall upgrading process, then resorting to standard mortgage financing is possible. Because the land is generally free at this point to the household (itself implying a major subsidy), most families can afford the monthly payment of a market-rate mortgage. Because of banks' lack of experience with loans to this group of households, both the mortgage insurance (or guarantees) and a secondary market outlet for the mortgages (outlined earlier) are likely to be required to induce private financial institutions into gaining experience in this segment of the market.

Hookups are conditional on the household paying the fees associated with service. Thus, the family who cannot afford the charges for piped water in his home must use the communal standpipes.⁴

1. See Struyk (forthcoming).

2. This need not always be the case, however. Many existing settlements are costly to upgrade because of their locations on hillsides, tidal flats, or in ravines.

3. Providing clear land title is certainly another factor over which government has some control; for one example, see Ward (1976).

4. This is a slight variation on the procedure used in a World Bank-financed project in Cartagena, Columbia. Churchill-Lycette, p. 17.

Turning to the other criteria used to judge the merits of alternative interventions, the provision of infrastructure appears to be quite efficient. There is little substitution between government and private activity in this quarter. As noted above, the cost per unit of service is generally highly competitive with providing the housing cum infrastructure package on a new site. The extent of targeting is less clear. Squatter areas that have been established for a number of years tend to become economically heterogeneous.¹ Likewise, areas in which the owners were able to purchase their lots but without services will generally not house the lowest income groups. Moreover, even if the infrastructure investments are targeted on neighborhoods predominantly occupied by the poor, there may be considerable turnover after the upgrading, as higher income households buy the serviced lots from their original owners.²

Upgrading infrastructure in existing residential communities requires a concerted administrative effort. Several countries now are embarked on wide-scale slum-upgrading programs, including Indonesia, Columbia, Tunisia, Tanzania, and the Philippines. While these programs have suffered growing pains as their scale has increased, the administrative tasks are being accomplished. In general, however, one expects the administrative difficulties to rise directly with emphasis placed on cost recovery, suggesting a trade-off between the equity and administrative feasibility aspects of the intervention.

D. Site Assembly

The problems of urban land markets are legion, ranging from prices driven by speculation to leapfrogging development patterns. They have been discussed in other sessions at this workshop.³ Here, we focus on a single problem: assembly of residential sites at the urban perimeter.

The overall problem is the difficulty of obtaining control of a site sufficiently large to permit the realization of certain economies in the development process.⁴ Moreover, where necessary, the sites must be so located that the attachment of the project's utilities to main distribution lines can be accomplished. Thus, the objective is the assembly of a site which can be readily developed into serviced lots.

There appear to be two principal impediments to assembling such sites. One is the combination of small holdings and fragmentation of ownership; the situation can reach an almost incredible degree of complexity in rich agricultural areas characterized by small family

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1. See, for example, Lindauer (1981).
 2. Unfortunately, there is little evidence on this point.
 3. In addition, the essays in Dunkerley (1978) offer a good introduction.
 4. Grimes (1982), for example, indicates this is a problem in Mauritius.

plots, as in the paddy lands of Korea, Indonesia, and Thailand, for example. The other is the set of laws which protects tenant farmers, land owners, or agricultural lands generally from possible exploitation. The protections offered by such laws can make assembly extremely difficult and time-consuming, ultimately raising the cost of development because of the long period of time some of the plots must be held by the developer before development can begin. In addition, because of these difficulties, the final sellers are able to (and must) extract very high prices for their plots, again raising residential site costs.

The idea of a government agency acting to control development seems obvious. Numerous possibilities exist: land banking, nationalization of development rights, restrictions on maximum land holdings, capital gains taxes on profits arising from the provision of services. The option explored here--land readjustment--casts government in the role of co-developer, an active partner in assembling, developing, and even selling the land.

A simplified example of the assembly and development process appears in Table 6. A 300 ha site, outlined by the solid line, is to be developed. Initially, the site is composed of 15 separate parcels. The example focuses on the experience of the owner of plot "B," a 40 ha parcel that is part of the overall site being developed. The owner retains title to his land, but gives permission for its development and agrees to financing improvements from the proceeds when the parcel is sold. Development costs consist of the sacrifice of one-third of the parcel to public purposes, plus 2,000 per ha for infrastructure. Ultimately, the average sales price is 8,000 per ha of net residential land. In this example, all of the original owners receive the same price per ha. The owner of plot B realizes a 79 percent net return.

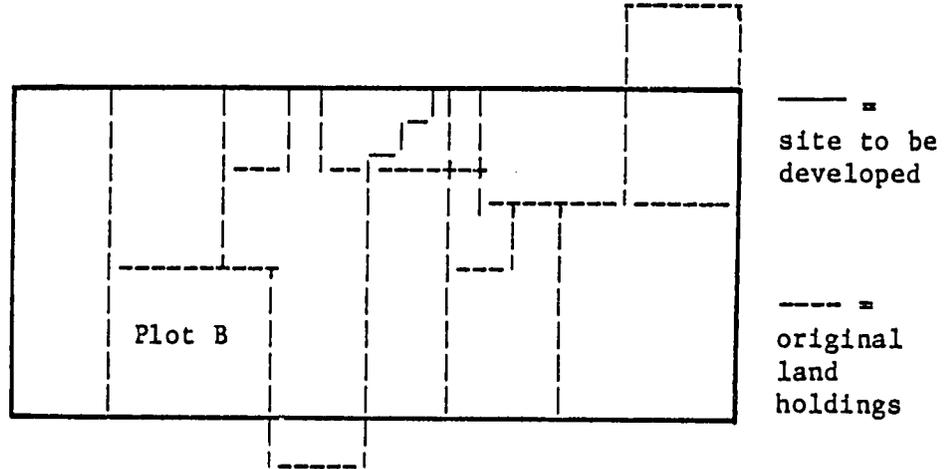
More elaborate versions of this process tie the development cost for each site and the parcel's sales price to the initial landowner. In many cases, owners dispose of their own sites. Thus profits can vary fairly widely within the site.

Another variation is for there to be cross-subsidization among the plots. Larger, more advantageously located plots can command higher prices in the market. These high prices can offset some of the revenue needed from smaller sites, perhaps reserved for sites and services plots or serviced lots with core housing. Total revenues still remain high enough to provide original owners with very satisfactory returns. The implementation of cross-subsidy schemes clearly requires a very strong government role in the disposition of developed sites.

Judged against our criteria, this role for government receives somewhat mixed reviews. It rates high marks in maximizing the use of government power to facilitate the operation of the urban land market. The process can result in land being made available on a more timely and spatially orderly basis than otherwise would have been the case. The cost to the government is staff time, which could be recovered as

TABLE 6
LAND ASSEMBLY AND DEVELOPMENT

Site under consideration:



Area of total site to be developed: 300 ha

Plot B: area: 40 ha
value at time of development: 1,000 per ha

Development costs: - 1/3 of gross area dedicated to public purposes
- cost per ha of infrastructure: 2,000

Average sales price per developed ha of residential site = 8,000

Return to owner of Plot B:

Cost: (initial value + development cost) = (1,000 + 2,000)
* 40 = 120,000

Revenues: (sales price * residential land) = 8,000 * 40 * .67
= 214,440

Return: 79 percent

well out of the proceeds of the sale of the developed lots. The Achilles heel of the intervention is the quality and quantity of administrative resources required for successful operation. Sites must be identified, owners negotiated with, development plans drawn and executed, and satisfactory payments to landowners carried out. This is a formidable list of tasks that must be accomplished efficiently and for a large number of projects simultaneously. If the administrative capacity is lacking, the well-intentioned intervention by government may well cause even greater delays in the development of residential sites, rather than speeding the process. This pushes land prices even higher; indeed, for the process to function so as to provide the land owner with an adequate rate of return requires that supplies be somewhat restricted in any case.¹

To date, land readjustment has not been widely employed. Among industrialized countries, Germany and Japan use it as a basic element in their overall land development process; it is also used in parts of Australia. Among developing countries, land readjustment is employed only in Taiwan and Korea. In Taiwan, urban readjustments have been concentrated at the fringes of Kaohsiung, the second city. The Koreans have gone further in implementing and perfecting the system and have built the general use of cross-subsidies of site in land readjustment projects into the official Korea Master Plan for Public Housing Construction and National Urban Land Development (1981-91).²

Aid in assembling and developing sites, like the other incentives described in this section, involves some action on the part of government to make it easier for households and/or developers to produce housing services. If creatively and carefully managed, such programs hold the promise of greater improvement in a nation's housing than more complete reliance on the use of the government's budget, taxing and regulatory powers.

1. If land readjustment is widespread, government controls the rate at which lands can be developed and, thus, strongly affects prices. For some general evidence on this point, see Gleeson (1979).

2. These various experiences are catalogued in the essays in Doebele (1982).

REFERENCES

- Churchill, A. with M. Lycette (1980). Shelter. Washington, D.C.: The World Bank, the Basic Needs Series.
- Doebele, W. (1982). Land Readjustment. Cambridge, Mass.: Lexington Books.
- Dunkerley, H. B., et al. (1978). Urban Land Policy Issues and Opportunities. Washington, D.C.: World Bank Staff Working Paper No. 283, 2 volumes.
- Gleeson, M. E. (1979). "Effects of An Urban Growth Management System on Land Values," Land Economics, Vol. 50. No. 2, pp. 155-68.
- Grimes, O. U., Jr. (1982). "Financing Urban Infrastructure in Developing Countries," in W. Doebele (ed.), Land Readjustment. Cambridge, Mass.: Lexington Books, pp. 207-12.
- Hardoy, J. E. and D. Satterthwaite (1981). Shelter: Need and Response. New York: John Wiley.
- Joshi, M., A. Khanna, R. Struyk, J. Tuccillo, M. Bueno (1982). The Philippines: Housing Finance. Washington, D.C.: The World Bank, Report No. 3732-PH.
- Levine, M. (1978). Federal Housing Policy: Current Programs and Recurring Issues. Washington, D.C.: Congressional Budget Office.
- Lindauer, D. L. (1981). The Tondo Project: Whom Have We Served? Washington, D.C.: The World Bank, Urban and Regional Economics Division, draft.
- Mayo, S., et al. (1989). Housing Allowances and Other Rental Housing Assistance Programs, Part 2: Costs and Efficiency. Cambridge, Mass.: Abt Associates.
- Mayo, S., H. Garnett, and M. Ramez (1982). Informal Housing in Egypt. Cambridge, Mass.: Abt Associates.
- Renaud, B. (1979). National Urbanization Policies in Developing Countries. Washington, D.C.: World Bank Staff Working Paper No. 347.
- Strassman, W. P. (1980). "Housing Improvement in An Opportune Setting: Cartagena, Columbia," Land Economics, Vol. 50. No. 2, pp. 155-68.

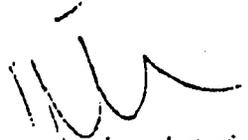
- Struyk, R. (forthcoming). "Dwelling Upgrading as an Element in the Housing Strategies of Developing Countries," Journal of Developing Areas.
- Struyk, R. (1980). A New System for Public Housing. Washington, D.C.: The Urban Institute Press.
- Ward, P. M. (1976). "The Squatter Settlement As Slum or Housing Solution: Evidence From Mexico City," Land Economics, Vol. 53, No. 3, pp. 330-46.
- Weis, E. B. and R. Pratt (1981). Housing Finance in Developing Countries. Salt Lake City, Utah: Richard T. Pratt Associates, Inc.

ALTERNATIVE METHODS FOR FINANCING SHELTER SECTOR PROJECTS

Carl House
November 9, 1982

Paper for the 4th Annual AID International Shelter Workshop for Senior Professionals

OF IMAGINARY NUMBERS



IN the cloudland of higher mathematics, there is a whole area of study called "imaginary numbers." What is an imaginary number? It is a multiple of the square root of minus one. What is the good of knowing that? Imaginary numbers, according to mathematicians, are useful in figuring out such problems as the flow of air or water past a curved surface like an airplane wing.

In ordinary life, imaginary numbers of a somewhat different kind seem to have become even more useful. From solemn public officials and eager corporations, from newspapers, television (and even, some dare say, from newsmagazines) comes a googol of seemingly definitive and unarguable statistics. They tell us, with an exactitude that appears magical, the number of heroin addicts in New York and the population of the world. By simulating reality, they assure us that facts are facts, and that life can be understood, put in order, perhaps even mastered.

If this sounds fanciful, consider a few specimens from one issue of the *New York Times* last week:

BANGKOK: In 1965, only 17% of the people in northeastern Thailand were within a day's journey of a main road. Today the figure is 87%.

NEW YORK: The St. Patrick's Day parade cost the city \$85,559.61, whereas Puerto Rico Day cost only \$74,169.44.

ATLANTA: There are 1.4 million illiterates in the U.S.

XABUL: Caravans traveling between Afghanistan and Pakistan "commonly carry up to 1,200 pounds of opium at a time."

In assuredly reporting these statistics, the *Times*—like all other journalistic enterprises—is carrying on a tradition founded by Archimedes. He set himself the task of computing the number of grains of sand that could be encompassed within the area of the known universe. After a great deal of figuring, accompanied by many diagrams, he produced an answer that satisfied him. (It mattered not that his data on the universe were wrong.)

The tradition flourishes today at many levels. It has been computed, for example, that the offspring of 450 moths can eat the weight of a diesel locomotive in one year. And that the average housewife washes 2.5 million kitchen utensils during her lifetime, the equivalent of a stack of dishes 70 times as high as the Empire State Building. And that 9.2 billion strokes of a car's back would generate enough electricity to light a 75-watt bulb for exactly one minute.

These statistics may well be true, and so may most of the *Times's* figures—but obviously some are truer than others. A census of illiterates in an advanced, well-documented country carries considerably more conviction than a report from the remote corners of Thailand. Nobody is really sure exactly how many people there are in Thailand, after all, much less the distance that one of them can travel in a day, so the margin for error is presumably considerably larger than a precise figure like 17% implies. What makes such numbers imaginary is that most of them are basically collections of someone's estimates of the unknowable. We can assert with some confidence that there are, say, four birds on a branch. As the numbers get larger, we still believe in them, but with less reason.

In almost any area of life today, the best—certainly the most honest—answer to a request for figures would be: Nobody knows. But that makes us feel that somebody has failed at his job; there must be a right answer, therefore a right answer is composed. Last week the Federal Government's Center for Disease Control announced that a certain drug company may have infected 5,000 hospital patients with contaminated intravenous solutions, contributing to the deaths of 500 people. When asked how this figure had been determined, a Government spokesman said that one estimate of 2,000 was "unrealistic" and another estimate of 8,000 was "unfair." So the authorities split the difference.

Imaginary numbers sound true—that is their function, after all—and so they may serve the cause of truth. But they can serve the purpose of falsehood just as well. At the highest levels of gov-

ernment, imaginary numbers can delude even the shrewdest of leaders with "quantifications" of reality. For years, the Pentagon demanded imaginary numbers from combat troops in Viet Nam: body counts, kill ratios, and even computations of the numbers of obscure villages that were free from Viet Cong control (to a certain percentage). With the figures produced, the computers could declare with statistical certainty that the war was being won. "Is it a coincidence," asks Arthur M. Ross, former U.S. Commissioner of Labor Statistics, "that the most elaborately measured war in American history is also the least successful?"

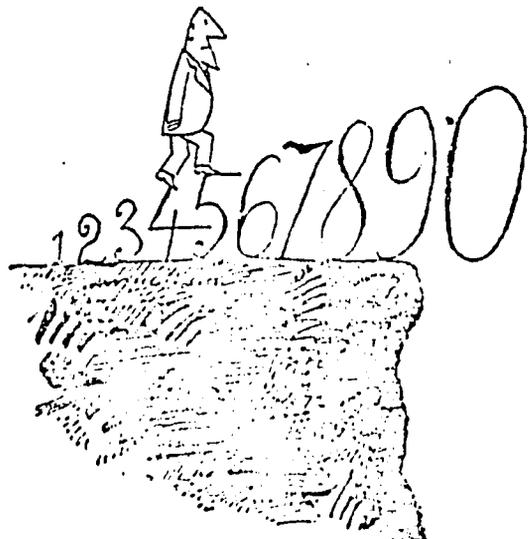
It is not that the figures are falsified, but that we create the figures we want to believe. If the numbers game involves fears and prejudices, imaginary numbers reinforce the prejudice, heighten the fear. Since many heroin addicts in New York commit crimes to buy drugs, to cite one example, it has often been stated that the addicts steal \$2 billion to \$5 billion worth of goods per year. Max Singer, president of the Hudson Institute, decided to inquire how the figure came to be computed. It turned out, as he reported in *The Public Interest*, that someone had multiplied an estimated 100,000 addicts by an estimated average habit of \$30 per day to determine a collective need of \$1.1 billion a year. And since a thief generally sells stolen property to a fence for about one-quarter of its value, four times \$1.1 billion produces a theoretical total of \$4.4 billion. Singer found, however, that the value of all the stolen goods in New York does not amount to nearly that much, and that the drug addicts probably take property worth about one-tenth of the popularly accepted figure. Conversely, then, there may not be 100,000 drug addicts in New York after all (Singer guesses 70,000 at most), but only in our nightmares.

If every statistic were regarded with similar skepticism, it might well be found that many of our most widely accepted figures are also, at least in part, imaginary numbers. The national rate of unemployment, for example, is now stated to be 5.6%, but that figure is based entirely on people who officially reported themselves out of work. Idle students, housewives who cannot find outside jobs, unsuccessful artisans—such people are not counted.

Statistics on crime are equally uncertain, since they mainly reflect police diligence in rounding up minor offenders and reporting all arrests. Then there are those "police estimates" that name a figure for the unknowable number of prostitutes in Los Angeles or the uncountable crowds outside the White House. If present figures are imprecise, beware of all projections that foretell the future, particularly those that talk of the increasing youthfulness of the "average American." Actually, because both birth and death rates have declined, the "average American" is getting older.

Is nothing, then, to be believed? Yes—the evidence of the senses and the observations of the mind, but not too many of the imaginary numbers that try to provide proof. How many is "not too many"? The computer is working on that.

• Otto Friedrich



Assumptions About a 100 Unit Apartment Building
(market basis, not subsidized)

The Development Corporation wants to build a 100 unit moderate income housing project in the Urban Renewal Area. It feels the people in the area can afford to pay \$230 per month in rent, and that additional income of \$29 per year per unit will be realized from a laundromat in the project. Vacancy losses are expected to be 5% and operating expenses are expected to be \$1131 per unit per year. The City has agreed to finance the project at a loan to value ratio of 75% with value determined at a 10% capitalization rate. The City will pass its borrowing terms through to the project, so financing will be at 8½% interest for a term of 30 years (9.23% k). Apartment sizes will average 500 square feet each (including an allocated share of common space), and it is believed that construction cost can be kept down to \$29 per square foot. Land is offered free by the City from the Urban Renewal land bank, and other development cost will amount to only \$35 per unit for fees, permits and miscellaneous expenses. The Development Corporation needs a 15% return on its equity.

Questions:

How much equity is required?

What is the return on equity?

Is the project feasible?

Is the cost of financing higher or lower than return or cost?

What does this mean?

Form for Income Property Development Arithmetic

Project: _____ Prepared by: _____
 Date: _____

	<u>Operating Accounts</u>		<u>Capital Accounts</u>
Rental Income $\frac{\text{units}}{\text{units}} \times \frac{\text{periodic rent}}{\text{rent}} \times \frac{\text{periods per year}}{\text{periods per year}}$	=	_____	
Other Income $\frac{\text{units}}{\text{units}} \times \frac{\text{periodic rent}}{\text{rent}}$	+	_____	
Vacancy _____ %	-	_____	
Adjusted Gross Income (AGI)	=	_____	
Operating Expenses _____ % of AGI or \$/unit	-	_____	
Debt Free Income (DFI)	=	_____	
Capitalization Rate	÷	_____ %	=
Value			_____
Loan to Value Ratio	x	_____ %	
Mortgage			=
Debt Service Constant (_____ % interest, _____ year)		_____ %K	
Debt Service	-	_____	
Cash Flow (CF)	=	_____	
<hr/>			
Number of Units		_____	
Square Feet per Unit (inc. allocated share of common area)	x	_____ sf/un	
Gross Building Area (GBA)	=	_____ sf	
Cost per Square Foot	x	_____	
Total Building Cost			=
Builder's Fee (_____ % of cost)			+
Land Cost			+
Other Costs (e.g., construction interest, off-site, administration, etc.)			+
Total Cost (TC)			=
<hr/>			
Equity (total cost less mortgage)			=
<hr/>			
Return on Cost (DFI÷TC)		_____ %	
Return on Equity (CF÷Equity)		_____ %	

Table of Debt Service Constants

Interest Rate	15 years	20 years	25 years	30 years	35 years	40 years
3%	.0823698	.0665517	.0569054	.0503925	.046182	.0429581
10%	.1289526	.1158026	.1090441	.1053086	.1031607	.1018975
15%	.1679505	.1580147	.1536997	.1517333	.1508176	.1503869
18%	.1932505	.1851974	.1820916	.1803502	.180347	.1801419
20%	.2107556	.203859	.2014142	.2005222	.2001934	.2000717
25%	.2562635	.251786	.2505156	.2501494	.2500433	.2500126

Development Arithmetic
Glossary of Terms

Gross Building Area (GBA) - The amount of space to be built, including basements, common areas, etc.

Gross Leasable Area (GLA) - The amount of space that can be rented, not including elevators, hallways, public washrooms, etc.

Building Efficiency - Useable area (or rentable area) divided by GBA.

Capital Accounts - Accounts for transactions that result in increasing or decreasing an asset or liability. Usually these are non-recurring accounts, e.g. construction costs, acquisition of land, the borrowing of money.

Operating Accounts - Recurring accounts, are received or paid periodically (monthly or annually). These would include rent, interest payments, routine maintenance, taxes, wages and salaries, costs of municipal services, etc.

ALL CASH TRANSACTIONS ARE EITHER CAPITAL OR OPERATING TRANSACTIONS.

Economic Rent - The amount of rent that is required to meet all the costs of capital as well as net operating expenses. This might be expressed as approximately 12% to 14% of total development cost, or even higher if a high level of expenses are involved and met by the owner of the property.

Affordable Rent - The amount that the tenant can afford to spend. This is usually expressed as 20% to 25% of household income for residential property. The difference between economic rent and affordable rent may be met by a subsidy, or it may result in a vacancy, or it may result in operating losses to the owner, or it may require the household to pay more than the "affordable" amount for rent.

Market Rent - The amount of rent that comparable units are getting in this market.

Debt Free Income - Cash flow produced by the project after payment of all operating expenses, but before considering the costs of capital. (Ground rent is a cost of capital for this purpose.) THIS IS A VERY IMPORTANT CONCEPT BECAUSE IT IS USED IN ESTIMATING THE VALUE OF PROPERTY.

Construction Cost - "Bricks and mortar". The cost of constructing the property including materials and labor. Does not include land, financing charges, administrative costs, and may not include site development costs. SOME PEOPLE FALL INTO THE TRAP OF TAKING THIS TO BE THE COSTS OF CREATING HOUSING. THEY ARE GROSSLY UNDERSTATING THE TRUE COSTS.

Total Development Cost (or simply "development cost") - This includes all the costs for bringing a project to a state of readiness for occupancy.

Mortgage - The assignment of property rights to a lender as security for a loan. The lender has the right to take over (or sell) the property to protect his interest. Any proceeds in excess of the outstanding loan balance would go to the owner.

Equity - Costs of the project that are not met by loans. Usually this means cash put into the project (or home) by the owner. Sometimes equity is provided by putting value other than cash into the project (like land or labor, "sweat equity").

Permanent Loan - long term financing, usually 20, 25, or 30 years, sometimes 15 years, or possibly 40 or 50 years. Actually the loan is usually repaid over this "term" by the amortization portion of debt service.

Construction Loan (or "bridge financing") - Short term loan to enable the project to be built. A permanent loan would usually not be made until the project is completed and ready for occupancy. Short term financing for construction is considered risky and commands a higher interest rate.

Capitalization Rate - The rate at which capital invested in fee ownership of a particular type of property is expected to earn income. More simply, it is the rate used to value an ongoing stream of cash flow. E.g. A building with debt free income of \$100,000 annually and valued with a cap rate of 10% would be said to be worth \$1,000,000.

Loan to Value Ratio - A prudent lender will not loan the full value of a project because if he is wrong in his valuation, or if something goes wrong for the project, he may not be able to get his money back. Therefore, he will lend less, perhaps 75% of the value. The ratio between what he will lend and what the project is worth is called the loan to value ratio.

Value - The price that it is judged that a property could be sold for in an orderly sale (as opposed to a distressed sale, or a sale made in a hurry).

Debt Service - The amount that must be paid monthly or annually to carry the mortgage. It includes interest and some amount each time towards repayment of the loan. Sometimes also, the lender will insist that real estate taxes and insurance be paid at the same time, but these would not be included in the definition of debt service.

Debt Service Constant - the percentage that is used to calculate the debt service amount. The loan amount is multiplied by the debt service constant to get the debt service. The debt service usually comes from a table. It is calculated using present value techniques.

Amortization - That portion of debt service that goes towards repayment of the debt. In the beginning it is very small because most of the debt service must go to interest. Later, as the mortgage balance is reduced, an increasing portion of the debt service goes to amortization, and as the mortgage is nearly paid off, most of the debt service is credited to amortization.

At other times, amortization is used with meaning similar to depreciation. But in our use of it in development arithmetic it will mean mortgage amortization.

Cash Flow - Operating cash flow available to the owner of the income property after payment of the costs of capital (excluding any charges for the use of equity). This is similar to debt free income, except that it is after costs of capital.

Feasibility - a concept that relates to whether or not the project is possible. Will the various people or entities who need to participate act favorably on the decision to participate in the project, or help it? Often criteria of "return on investment" are used to determine feasibility.

Return on Cost - debt free income divided by total development costs. This measures the average return to all people (entities) who have invested in the project. It's advantage is that it is easy to calculate. A project that has a return on cost greater than the current interest rate is probably feasible and will, in fact, benefit from "positive leverage". That is, the return to the owners will be higher than the return on the total project.

Return on Equity - cash flow divided by equity required. This is the return to be experienced by the owner of the project. His position is usually considered relatively risky, so his return should be relatively high.

Tests for the 100 Unit Apartment Building

- Test #1. Build 200 units instead of 100.
How much equity is needed?
What will the return on equity be?
- Test #2. Can't rent apartments for \$230, can only get \$190.
Mortgages has already closed.
What happens to cash flow?
- Test #3. Operating expenses are 15% more than expected.
Mortgage is already closed.
What happens to cash flow?
- Test #4. New research report says rent will be \$210.
Mortgage is not yet committed.
How much equity is required?
What happens to cash flow?
- Test #5. Facts from test #2.
How much can you spend on construction cost per
square foot to keep approximately the same returns?
- Test #6. Municipal bond rates go up.
Interest rate is increased to 12%.
How much must you increase rent?

Selected Housing Subsidy Programs
Market and Basic Rents

	<u>FHA 236</u>	<u>Mitchell Lama</u>	<u>Mitchell Lama plus FHA 236</u>	<u>FHA 221 (d) (3) Below Market Rate</u>	<u>FHA 221 (d) (3) Market Rate</u>	<u>Conventional Financing</u>
<u>Expenses:</u>						
Operating Expenses	\$ 754	\$ 754	\$ 754	\$ 754	\$ 754	\$ 754
Real Estate Taxes	377	377	377	377	377	377
Vacancy Allowance	86	114	77	95	129	140
Profit @ 6% of "Equity".	95	48	48	95	95	467*
Less: Other Income	<u>-29</u>	<u>-29</u>	<u>-29</u>	<u>-29</u>	<u>-29</u>	<u>-29</u>
Total Expenses	\$1,283	\$1,264	\$1,227	\$1,292	\$1,326	\$1,709
Monthly	\$ 107	\$ 105	\$ 102	\$ 108	\$ 111	\$ 142
<u>Market Rent:</u>						
Total Expenses	\$1,283	\$1,264	\$1,227			
Debt Service (40 yrs.)	@ 8½% 1,255	@ 7% 1,123	@ 7% 1,123			@ 8½% 1,050**
Insurance Premium	@ ½% 71	@ ½% 38	@ ½% 38			
Market Rent	\$2,609	\$2,425	\$2,425			\$2,759
Monthly	\$ 217	\$ 202	\$ 202			\$ 230
<u>Basic Rent</u>						
Total Expenses	\$1,283	\$1,264	\$1,227			
Debt Service	@ 1% 433	@ 7% 1,123	@ 1% 457	@ 3% 613	\$1,326	
Insurance Premium		@ ½% 38	@ ½% 38		1,255	
Less: R.E. Tax Exemption		(136)	(136)			
Basic Rent	\$1,716	\$2,289	\$1,586	\$1,905	\$2,581	
Monthly	\$ 143	\$ 191	\$ 132	\$ 159	\$ 215	

* 14.8% of equity
** 30 year term

Selected Housing Subsidy Programs
Sources of Capital and Rate of Return

	<u>FHA 236</u>	<u>Mitchell Lama</u>	<u>Mitchell Lama plus FHA 236</u>	<u>FHA 221 (d) (3) Below Market Rate</u>	<u>FHA 221 (d) (3) Market Rate</u>	<u>Conventional Financing</u>						
<u>Sources of Capital:</u>												
Construction costs	\$ 14,535	\$ 14,535	\$ 14,535	\$ 14,535	\$ 14,535	\$ 14,535						
Builders Fee	<u>1,319</u>	<u>1,319</u>	<u>1,319</u>	<u>1,319</u>	<u>1,319</u>	<u>- -</u>						
Total Cost	\$ 15,854	\$ 15,854	\$ 15,854	\$ 15,854	\$ 15,854	\$ 14,535						
Mortgage amount	\$ 14,268	\$ 15,061	\$ 15,061	\$ 14,268	\$ 14,268	\$ 11,381						
FHA "Equity"	1,585	793	793	1,585	1,585	- -						
Less: Builder's fee	<u>1,319</u>	<u>1,319</u>	<u>1,319</u>	<u>1,319</u>	<u>1,319</u>	<u>- -</u>						
Cash equity	266	(527)	(527)	266	266	3,153						
Loan-to-value ratio	90%	95%	95%	90%	90%	75%						
<u>Rate of Return:</u>												
	Cash Flow	%	Cash Flow	%	Cash Flow	%	Cash Flow	%	Cash Flow	%	Cash Flow	%
Total Project	\$ 540	3.72	\$ 1,216	8.36	\$ 512	3.52	\$ 717	4.94	\$ 1,362	9.37	\$ 1,517	10.44
Developer	107	40.32	55	Infinite	55	Infinite	105	39.26	107	40.08	467	14.82
Lender	1,255	8.80	1,123	7.46	1,123	7.46	613	4.30	1,255	8.80	1,050	9.23
Public	- 822		38		- 666							

Table of Mortgage Constants
(annual rate with monthly payments)

<u>Interest Rate</u>	<u>5 years</u>	<u>7 years</u>	<u>10 years</u>	<u>15 years</u>	<u>20 years</u>	<u>25 years</u>	<u>30 years</u>	<u>35 years</u>	<u>40 years</u>	<u>50 years</u>
1% ⁰	0.205125	0.147975	0.1051249	0.0718193	0.0551873	0.0452247	0.0385967	0.0338743	0.0303427	0.0254231
2% ⁰	0.2103331	0.1532092	0.1104161	0.077221	0.060706	0.0508625	0.0443543	0.0397515	0.0363391	0.0316549
3% ⁰	0.2156243	0.1585596	0.1158729	0.0828698	0.0665517	0.0569054	0.0505925	0.046182	0.0429581	0.0386373
4% ⁰	0.2209983	0.1640257	0.1214942	0.0887626	0.0727176	0.0633404	0.0572893	0.053133	0.0501526	0.0462848
5% ⁰	0.2264548	0.1696069	0.1272786	0.0948952	0.0791947	0.0701508	0.0644186	0.0605625	0.0578636	0.0544967
6% ⁰	0.2319936	0.1753027	0.1332246	0.1012628	0.0859717	0.0773162	0.0719461	0.0684228	0.0660256	0.0631686
7% ⁰	0.2376144	0.1811122	0.1393302	0.1078594	0.0930359	0.0848135	0.0738363	0.0766628	0.0745718	0.0722026
8% ⁰	0.2433167	0.1870346	0.1455931	0.1146783	0.1003728	0.0926179	0.0880517	0.0852313	0.0834374	0.0815129
9% ⁰	0.2491003	0.1930689	0.1520109	0.121712	0.1079671	0.1007036	0.0965547	0.0940792	0.0925634	0.0910284
10% ⁰	0.2549645	0.1992142	0.1585809	0.1289526	0.1158026	0.1090441	0.1053086	0.1031607	0.1018975	0.1006927
11% ⁰	0.2609091	0.2054692	0.1653	0.1363916	0.1238626	0.1176136	0.1142788	0.1124349	0.1113953	0.1104629
12% ⁰	0.2659334	0.2118328	0.1721651	0.1440202	0.1321303	0.1263869	0.1234335	0.121866	0.12102	0.1203072
13% ⁰	0.2730369	0.2183036	0.1791729	0.1518291	0.1405891	0.1353402	0.1327439	0.1314232	0.1307417	0.1302027
14% ⁰	0.279219	0.2248801	0.1863197	0.159809	0.1492225	0.1444513	0.1421846	0.1410808	0.1405368	0.1401331
15% ⁰	0.2854792	0.2315611	0.1936019	0.1679505	0.1580147	0.1536997	0.1517333	0.1508176	0.1503869	0.150087
16% ⁰	0.2918167	0.2383448	0.2010157	0.1762441	0.1669507	0.1630667	0.1613708	0.1606163	0.1602778	0.1600566
17% ⁰	0.2982309	0.2452297	0.2085572	0.1846805	0.1760161	0.1725356	0.171081	0.1704631	0.1701988	0.1700367
18% ⁰	0.3047211	0.2522141	0.2162222	0.1932505	0.1851974	0.1820916	0.1808502	0.180347	0.1801419	0.1800238
19% ⁰	0.3112866	0.2592962	0.2240068	0.2019451	0.1944822	0.1917216	0.1906671	0.1902594	0.190101	0.1900153
20% ⁰	0.3179266	0.2664744	0.2319068	0.2107556	0.203859	0.2014142	0.2005222	0.2001934	0.2000717	0.2000099
21% ⁰	0.3246403	0.2737467	0.239918	0.2196735	0.2133172	0.2111595	0.210408	0.2101439	0.2100508	0.2100063
22% ⁰	0.3314269	0.2811113	0.2480363	0.2286907	0.2228472	0.2209491	0.2203182	0.2201069	0.2200359	0.2200041
23% ⁰	0.3382857	0.2885663	0.2562574	0.2377996	0.2324404	0.2307756	0.2302477	0.2300792	0.2300254	0.2300026
24% ⁰	0.3452156	0.2961097	0.2645772	0.2469928	0.242089	0.2406329	0.2401925	0.2400586	0.2400179	0.2400017
25% ⁰	0.3522159	0.3037396	0.2729915	0.2562635	0.2517859	0.2505157	0.2501494	0.2500433	0.2500126	0.2500011

These mortgage constants are used to determine the constant annual debt service (paid in equal monthly installments) that will repay principal plus interest at a given rate over a given number of years. For example, a mortgage for 90% of the cost of a building costing \$20,000 will provide \$18,000 in financing proceeds and will require constant annual debt service of \$1895 (10.53% of \$18,000) to repay principal and interest at 10% over 30 years.

Table of Discount Factors

years	The present value of \$1 received at the end of "n" years using a discount rate of "r" percent.						The present value of \$1 received annually for "n" years using a discount rate of "r" percent.					
	5.0%/	10.0%/	15.0%/	20.0%/	25.0%/	30.0%/	5.0%/	10.0%/	15.0%/	20.0%/	25.0%/	30.0%/
1	0.952381	0.909091	0.869565	0.833333	0.8	0.769231	0.952381	0.909091	0.869565	0.833333	0.8	0.769231
2	0.907029	0.826446	0.756144	0.694444	0.64	0.591716	1.85941	1.735537	1.625709	1.527778	1.44	1.360947
3	0.863838	0.771315	0.657516	0.578704	0.512	0.455166	2.723248	2.486852	2.283225	2.106481	1.952	1.816113
4	0.822702	0.683013	0.571753	0.482253	0.4096	0.350128	3.545951	3.169865	2.854978	2.588735	2.3616	2.166241
5	0.783526	0.620921	0.497177	0.401878	0.32768	0.269329	4.329477	3.790787	3.352155	2.990612	2.68928	2.43557
6	0.746215	0.564474	0.432328	0.334898	0.262144	0.207176	5.075692	4.355261	3.784483	3.32551	2.951424	2.642746
7	0.710681	0.513158	0.375937	0.279082	0.209715	0.159366	5.786373	4.868419	4.16042	3.604592	3.161139	2.802112
8	0.676839	0.466507	0.326902	0.232568	0.167772	0.122589	6.463213	5.334926	4.487322	3.83716	3.328911	2.924702
9	0.644609	0.424098	0.284262	0.193807	0.134218	0.0943	7.107822	5.759024	4.771584	4.030967	3.463129	3.019001
10	0.613913	0.385543	0.247185	0.161506	0.107374	0.072538	7.721735	6.144567	5.018769	4.192472	3.570503	3.091539
11	0.584679	0.350494	0.214943	0.134588	0.085899	0.055799	8.306414	6.495061	5.233712	4.32706	3.656403	3.147338
12	0.556837	0.318631	0.186907	0.112157	0.068719	0.042922	8.863252	6.813692	5.420619	4.439217	3.725122	3.19026
13	0.530321	0.289664	0.162528	0.093464	0.054976	0.033017	9.393573	7.103356	5.583147	4.532681	3.780098	3.223277
14	0.505068	0.263331	0.141329	0.077887	0.04398	0.025398	9.898641	7.366687	5.724476	4.610567	3.824078	3.248675
15	0.481017	0.239392	0.122894	0.064905	0.035184	0.019537	10.379658	7.60608	5.84737	4.675473	3.859263	3.268211
16	0.458112	0.217629	0.106865	0.054088	0.028147	0.015028	10.83777	7.823709	5.954235	4.729561	3.88741	3.283239
17	0.436297	0.197845	0.092926	0.045073	0.022518	0.01156	11.274066	8.021553	6.047161	4.774634	3.909928	3.2948
18	0.415521	0.179859	0.080805	0.037561	0.018014	0.008892	11.689587	8.201412	6.127966	4.812195	3.927942	3.303692
19	0.395734	0.163508	0.070265	0.031301	0.014412	0.00684	12.085321	8.36492	6.198231	4.843496	3.942354	3.310532
20	0.376889	0.148644	0.0611	0.026084	0.011529	0.005262	12.46221	8.513564	6.259331	4.86958	3.953883	3.315794
21	0.358942	0.135131	0.053131	0.021737	0.009223	0.004048	12.821153	8.648694	6.312462	4.891316	3.963107	3.319842
22	0.34185	0.122846	0.046201	0.018114	0.007379	0.003113	13.163003	8.77154	6.358663	4.90943	3.970485	3.322955
23	0.325571	0.111678	0.040174	0.015095	0.005903	0.002395	13.488574	8.883218	6.398837	4.924525	3.976388	3.32535
24	0.310068	0.101526	0.034934	0.012579	0.004722	0.001842	13.798642	8.984744	6.433771	4.937104	3.981111	3.327192
25	0.295303	0.092296	0.030378	0.010483	0.003778	0.001417	14.093995	9.07704	6.464149	4.947587	3.984888	3.328609
26	0.281241	0.083905	0.026415	0.008735	0.003022	0.00109	14.375185	9.160945	6.490564	4.956323	3.987911	3.3297
27	0.267848	0.076278	0.02297	0.00728	0.002418	0.000839	14.643034	9.237223	6.513534	4.963602	3.990329	3.330538
28	0.255094	0.069343	0.019974	0.006066	0.001934	0.000645	14.898127	9.306567	6.533598	4.969668	3.992263	3.331183
29	0.242946	0.063039	0.017369	0.005055	0.001547	0.000496	15.141074	9.369606	6.550877	4.974724	3.99381	3.331679
30	0.231377	0.057309	0.015103	0.004213	0.001238	0.000382	15.372451	9.426914	6.56598	4.978936	3.995048	3.332061
40	0.142046	0.022095	0.003733	0.00068	0.000133	0.000028						
50	0.087204	0.008519	0.000923	0.00011	0.000014	0.000002						
100	0.007604	0.000073	0.000001									

$$V = C \cdot (1+R)^{-N}$$

PRESENT VALUE ILLUSTRATION

TABLE A
Present Value of \$1

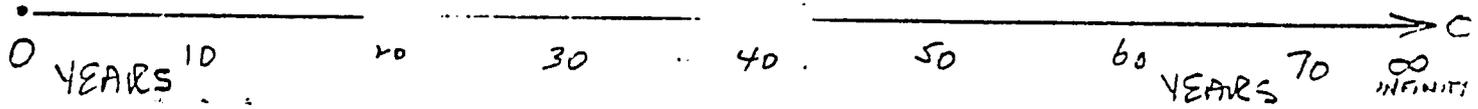
Table B
PRESENT VALUE OF \$1 RECEIVED
ANNUALLY FOR N YEARS

Table C
PRESENT VALUE OF \$1/12 RECEIVED
MONTHLY FOR N YEARS

Years hence	10%	10%	10%
1	.909 ← ①	.909	0.950
2	.826	1.735	1.814
3	.751	2.487	2.599
4	.683	3.170	3.313
5	.621	3.781	3.962
6	.564	4.355	4.551
7	.513	4.858	5.088
8	.467	5.335	5.575
9	.424	5.759	6.018
10	.386	6.145 ← ②	6.421
11	.350	6.495	6.788
12	.319	6.814	7.121
13	.290	7.103	7.423
14	.263	7.367	7.699
15	.239	7.608	7.948
16	.218	7.824	8.178
17	.198	8.023	8.383
18	.180	8.201	8.571
19	.164	8.365	8.742
20	.149	8.514	8.897
21	.135		
22	.123	8.649	9.038
23	.112	8.772	9.167
24	.102	8.883	9.283
25	.092	8.983	9.389
26	.084	9.077	9.486
27	.076	9.161	9.574
28	.069	9.237	9.653
29	.063	9.307	9.726
30	.057	9.373	9.792
40	.022	9.427 ← ③	9.852 ← ④
50	.009	9.779	10.220
		9.915 ← ④	10.361

- ① The present value of \$1.00 received one year from now and valued at a 10% discount rate is \$.909 because \$.909 invested at 10% interest will be worth \$1.00 in one year.

- ② The present value of \$1.00 received annually (and valued at 10%)
- ③ \$1.00 rec'd annually for 10 years is worth \$6.14
- ④ \$1.00 rec'd annually for 30 years is worth \$9.43
- ⑤ \$1.00 rec'd annually for 50 years is worth \$9.92 which approaches the value of a \$1.00 received annually forever.
- ⑥ \$1.00 rec'd annually forever (to infinity) is worth \$10.00 (\$1.00 capitalized at 10% or $10 = 1 \div .1$)
- ⑦ $1/12^{\text{th}}$ of \$1.00 rec'd monthly is worth more because the money is received sooner.



Valuation of Constant Cash Flow Stream
(to be valued at 10% discount rate)

	Years									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>
Cash Flow	\$1000	\$1000	\$1000	\$1000	\$1000	\$1000	\$1000	\$1000	\$1000	\$1000
Present Value Factor (10%)	.9091	.8264	.7513	.6830	.6209	.3855	.1486	.0573	.0221	.0085
Present Value	\$ 909	\$ 826	\$ 751	\$ 683	\$ 621	\$ 386	\$ 149	\$ 57	\$ 22	\$ 9
Cumulative Present Value	\$ 909	\$1736	\$2487	\$3170	\$3791	\$6145	\$8514	\$9427	\$9779	\$9914
Present Value Multiple	.9	1.8	2.5	3.1	3.8	6.1	8.5	9.4	9.8	9.9

Applications

1. Capitalization Rate

$\$1000 \div 10\% = \$10,000$ if cash flow stream is infinite

2. Mortgage Constant

30 years @ 10% interest = 10.53% constant
reciprocal of 10.53% is 9.4 multiple

3. Capitalized Value of Leasehold

Lease	\$1000
Years	10
Value	\$6145

4. Discount Notes for 10% Yield

Face Value	\$13,333 (due in 5 years)
7½% interest	\$ 1,000/year
<u>Current Worth</u>	
Interest	\$ 3,791
Face Value	8,279 (.6209 x \$13,333)
Total Value	\$12,070
Face Value	\$13,333
Current Worth	12,070
Discount	\$ 1,263

Valuation of Uneven Cash Flow Stream

Value Using 10 1/2% Discount Rate

	<u>TOTAL</u>	<u>YEARS</u>															
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>
CASH FLOW	\$95265	\$ -250	\$-10203	\$-11428	\$-3533	\$ 3464	\$ 246	\$11027	\$11778	\$14753	\$11961	\$10293	\$19561	\$16403	\$ 4387	\$ 2111	\$13096
PV FACTOR (10.5%)		0.9050	0.8190	0.7412	0.6707	0.6070	0.5493	0.4971	0.4499	0.4071	0.3684	0.3334	0.3018	0.2731	0.2471	0.2236	0.2024
PV OF CASH	\$18662	\$ -226	\$-14973	\$ -8470	\$-2370	\$ 2103	\$ 135	\$ 5879	\$ 5299	\$ 6006	\$ 4407	\$ 6099	\$ 5903	\$ 4501	\$ 1084	\$ 472	\$ 2812

Illustration of Internal Rate of Return (which is 18.7%)

	<u>TOTAL</u>	<u>YEARS</u>															
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>
CASH FLOW	\$95265	\$ -250	\$-10203	\$-11428	\$-3533	\$ 3464	\$ 246	\$11027	\$11778	\$14753	\$11961	\$10293	\$19561	\$16403	\$ 4387	\$ 2111	\$13096
PV FACTOR (18.7%)		0.8418	0.7087	0.5966	0.5022	0.4228	0.3559	0.2996	0.2522	0.2123	0.1787	0.1504	0.1267	0.1066	0.0898	0.0756	0.0636
PV OF CASH	\$ 0	\$ -210	\$-12956	\$ -6817	\$-1774	\$ 1464	\$ 87	\$ 3543	\$ 2970	\$ 3132	\$ 2138	\$ 2752	\$ 2477	\$ 1757	\$ 394	\$ 159	\$ 884

ALTERNATIVE MORTGAGE INSTRUMENTS
FOR DEVELOPING COUNTRIES

- I. Introduction
- II. Issues in indexation
- III. Conventional mortgage instruments
 - American style mortgages
 - European style mortgages
- IV. Indexation of mortgage instruments
 - Bondlike indexation
 - An alternative indexation methodology
- V. Issues in housing finance systems
- VI. Variable payment mortgages
 - The variable rate mortgage
 - The rollover mortgage
 - The adjustable rollover mortgage
 - The payment capped adjustable rate mortgage

Eugene A. Brady
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October 1982

INTRODUCTION

One of the characteristics that most developing nations have in common is a relatively high rate of inflation. The current worldwide recession, coupled with high interest rates as a result of U.S. monetary policy, has led to serious balance of payments problems for Third World countries. Their exports have been eroded by low worldwide commodity prices, and their import earnings have in large measure gone to finance payments of external debt. As a result, the currencies of Third World nations have, as a rule, softened considerably against those of the industrial world, particularly against the United States dollar. The end result has been a spurt of inflation that has caused serious problems for financing home purchases in developing countries.

New types of mortgage instruments have had to be designed to deal with domestic inflation, high real interest rates, and exchange rate risk. There are two major types of solutions to these problems. One of them involves indexation of mortgage instruments, and the other involves making the mortgage instrument intertemporally flexible through sequential adjustments in interest rates, down payments and amortization periods. Let us consider each of these two approaches in order, after examining the so-called conventional mortgage.

The institutional framework in which these methodologies will be applied is one in which there are five sets of economic agents; private savers, who provide loanable funds for housing finance; mortgage borrowers, who borrow to finance home purchases; private financial intermediaries, who provide a link between the private saver and the mortgage borrower; domestic government agencies, which subsidize, intermediate, or regulate financial transactions; related to housing and foreign lenders, who provide external loans to the domestic housing financial system.

ISSUES IN INDEXATION

Many Third World countries have had inflation forced on them by external forces that are beyond their control. Imbalances in the foreign trade of developing nations cause devaluations in their domestic currencies. As their currencies depreciate relative to the U.S. dollar or other "strong" currencies, readjustments of exchange rates cause the domestic price levels to escalate in developing countries. The recent experiences of Peru, Bolivia, Mexico and Argentina are good examples of domestic inflation caused by external forces. The major two external forces have been low worldwide commodity prices as a result of the world recession, and high domestic interest rates. Of course, some of the causes of inflation and currency devaluation have been internal. Mexico, for example tried to raise petroleum prices in a period of slumping demand, since Mexican policymakers had committed the economy to an unsustainable growth program and borrowed extensively from external sources to finance it. Argentina involved itself in an expensive war with Great Britain. Bolivia continued to saddle the economy with inefficient government enterprises, borrowing from external sources to support inefficient operations and maintain low prices on food and petroleum. The list could go on to include Brazil, Venezuela, South Korea, Nigeria, the Phillipines, etc. However, the main point is that these economies, for whatever reason, have had extremely high rates of inflation forced on them. Indexation is an important tool to minimize the distortions introduced into relative prices by unanticipated inflation. These distortions are caused by contracts between economic agents being entered into in terms of nominal prices under wrong assumptions about the likely future course of inflation.

Say, for example, that a home borrower contracts with a mortgage lender to borrow money at a 20% annual rate of interest, which reflects the view of

both borrower and lender that the anticipated rate of inflation over the life of the mortgage contract will be in the neighborhood of 17% annually. The 20% nominal interest rate contract reflects the fact that the lender is willing to lend at a real 3% rate of return, and the borrower is willing to pay a real return of 3%. If the actual rate of inflation deviates from 17%, either upward or downward, the real terms of the contract shift to favor either the borrower or the lender. However, an indexation clause could be instituted which would guarantee that both the borrower and the lender will indeed receive the real rate of interest they have agreed upon. Making the mortgage contract in real terms as opposed to nominal terms will eliminate the distortive side effects from unanticipated inflation.

It would be a mistake, however, to assume that widespread escalator clauses will provide a panacea for inflation adjustments. It is impossible to escalate all contracts (for example, currency and external debt) and it is very costly to apply monetary correction factors on a substantial number of them. It would be a lot better if the monetary authority could keep the rate of inflation low so that monetary correction would not be necessary. But since for many Third World countries inflation is inevitable, it would be useful to be able to inflation-proof long term loans in the manner described above.

There has been one unwarranted objection to indexation by businessmen. Many people feel that it is too risky for them to contract an open-ended commitment in nominal terms. At least with a nominally agreed contract they know exactly what their obligations and future credits are, where with indexation they do not. These businessmen are correct in that their views stem from their experiences in an economy with stable prices. However, when the rate of inflation varies, and is partially beyond the control of the

Central Bank, the agreement fixed in nominal terms is much more risky than an agreement fixed in real terms.

There are two major objections that have been raised with regard to the use of indexation or monetary correction factors in the U.S. The first one is that going to a system of indexation is "living with inflation" rather than licking the problem of inflation. Certain politicians have taken the posture that we should try to beat inflation rather than attempting to devise policies to live with it, so that to many analysts, indexation is "Anti-American." This is an unfounded objection in terms of the way that most economists view the problem. The second major objection would hold that indexation rigidifies the relative price structure. If monetary correction factors were used on a widespread basis the market would be impeded in its ability to allow relative prices to change in response to changes in supply and demand. For example, suppose apple prices and orange prices were indexed to the overall cost of food. Suppose further that there was a big freeze in Florida that sharply curtailed the supply of oranges. With indexation, orange prices could not rise relative to apple prices so that the end result would be a glut of apples and a shortage of oranges. The market would not function properly.

Clearly, there are areas where indexation will not work, such as internationally traded commodities such as cotton, coffee, tin, silver, etc. But there are a variety of areas where indexation will increase the effectiveness of operating in an economy subject to wide swings in the rate of inflation. A major problem for many Third World countries is the lack of a trusted index which reflects the true inflationary picture in the economy.

Brazil has operated with escalator provisions and monetary correction since 1964 on a rather widespread scale. Their eighteen year experience indicates that monetary correction will operate efficiently in a variety of situations. Consider the following major areas where indexation has

been used:

a. Escalator provisions have been in effect for minimum wages since 1964. Wages are revised annually, based on changes in the cost of living. These adjustments are made on a regional basis.

b. Savings deposits, Government debt, public loans and bank credits are all indexed. For savings deposits, annual interest is earned on a capital value that is adjusted every quarter. Government debt is adjusted nominal loan values are adjusted annually and interest payments are adjusted to changes in the rate of inflation.

c. All rent and lease contracts are indexed. An increase in consumer prices or an increase in statutory minimum wages form the basis of these adjustments.

d. Social insurance benefits are raised in proportion to changes in the minimum wage.

e. Both income taxes and profits taxes are corrected for inflation. Tax-allowable exemptions and deductions and incomes recorded in tax rate schedules as taxable at specified/are raised by a multiplier determined levels, by the National Economic Council. Balance sheet items are adjusted for price increases over the interval between acquisition and disposal.

What follows is a brief summary of the pros and cons of indexation as viewed in a broad framework of an inflationary spiral in developing countries:

Arguments in favor of indexation

1. It keeps unanticipated changes in the rate of inflation from having positive and/or negative effects upon contracts which would otherwise be made in nominal, as opposed to real, magnitudes.

2. Indexing is a way of living with inflation which makes inflation less harmful than it would otherwise be.

3. Indexing allows real economic growth to accompany rather rapid rates of inflation, as the Brazilian experience. Without indexing the Central Bank would have to impose stringent monetary measures to curtail inflation, leading to high interest rates and negative real economic growth.

Arguments against indexation

1. It means the economic policy makers have given up fighting inflation and are content to live with it.

2. It rigidifies the structure of relative prices and impedes the working of the free market place.

3. Indexation cannot be done for all prices, wages and contracts. It is possible only to achieve partial indexation. Indexing only partially may cause worse distortions in the economic fabric than no indexing at all.

CONVENTIONAL MORTGAGE INSTRUMENTS

In the past, most housing finance systems in Third World countries have employed so-called "conventional" mortgages. These mortgages have traditionally been of two types. The first, sometimes called the American style mortgage, consists of home financing with a set down payment and a given amortization period, with level payments throughout the life of the mortgage. The monthly payment is set at such a level that it covers the interest accrued during the interval, with the remainder of the payment applied against the principal. In the early period of the mortgage the interest component of the monthly payment is high, and as the balance of the mortgage is brought down an increasingly greater proportion of the monthly payment goes to principal and a smaller proportion to interest. The level payments are set so that the outstanding balance on the mortgage loan is diminished to zero with the last payment. Consider a \$10,000 loan with an 8 year life under the American style level payment conventional mortgage with a 12% interest rate, which would dictate an annual payment of \$2,013:

<u>Year</u>	<u>Interest Payment</u>	<u>Principal Payment</u>	<u>Loan Balance</u>
1	1,200.	813.	9,187.
2	1,102.	911.	8,276.
3	993.	1,020.	7,256.
4	871.	1,142.	6,114.
5	734.	1,279.	4,835.
6	580.	1,433.	3,402.
7	408.	1,605.	1,797.
8	216.	1,797.	0

The European style conventional loan is one where the mortgage borrower agrees to repay the loan in equal payments of principal plus the interest on the unpaid balance. Consider, for example, a \$10,000 loan with an 8 year amortization period and a 12% interest. The annual payments would appear as follows:

<u>Year</u>	<u>Interest Payment</u>	<u>Principal Payment</u>	<u>Total Payment</u>	<u>Loan Balance</u>
1	1,200.	1,250.	2,450.	8,750.
2	1,050.	1,250.	2,300.	7,500.
3	900.	1,250.	2,150.	6,250.
4	750.	1,250.	2,000.	5,000.
5	600.	1,250.	1,850.	3,750.
6	450.	1,250.	1,700.	2,500.
7	300.	1,250.	1,550.	1,250.
8	150.	1,250.	1,400.	0

The major advantage this instrument has is the ease at which it can be calculated. However, in all other respects it has serious drawbacks in a developing economy subject to inflation. The highest payments come in the early stages of the mortgage and the interest payments decline as the mortgage is paid off. It might be a useful instrument in an economy undergoing rapid deflation, but rapidly declining prices and wages are not found in Third World countries at the present time.

INDEXATION OF MORTGAGE INSTRUMENTS

Most financial intermediaries, which deal in housing finance, have their assets (home mortgages) and their liabilities (savings deposits) expressed in the same money terms. However, they differ in time duration. The liabilities are in practice due on demand or in rather short intervals, while the

assets are long term. Accelerating inflation has an uneven impact on these institutions. If a substantial proportion of the mortgage portfolio was issued in fixed rate conventional mortgages, when inflation and interest rates were much lower than the current rate of inflation, then these older mortgages fall in value as the inflation rate picks up. However, the financial intermediary is usually forced to pay the current rate of interest on its entire savings deposit liabilities. If assets and liabilities were evaluated at true market value with increasing inflation, virtually all U.S. savings and loan associations would be technically insolvent at the present time.

One way to avoid the problem of decapitalization would be to "index" the mortgage instrument to the rate of inflation. Since nominal interest rates and the rate of inflation generally move together, the financial insolvency due to accelerating inflation could be offset. Consider an indexed mortgage that has many characteristics of an ordinary bond. The mortgage borrower could agree to pay, for example, 3% plus the rate of inflation over the amortization period of the loan, and to make a "balloon payment" equal to the amount of the initial amount borrowed at the termination date of the loan. The rate of inflation is determined by whatever objective yardstick the Government uses to measure inflation. For example, assume that the mortgage borrower agrees to a loan of \$10,000. for a period of 8 years at a rate of interest equal to the rate of inflation plus 3%. Assume further that the rate of inflation as measured by a standard index amounts to 25% per year over the entire 8 year interval. The annual interest payments and the repayment of principal at the end of the amortization period would be as follows:

<u>Year</u>	<u>Index</u>	<u>Percent change in the index</u>	<u>Interest Payments</u>	<u>Loan Balance</u>
1	100.00	-	300	10,000
2	125.00	25%	2,800	10,000
3	156.25	25%	2,800	10,000
4	195.31	25%	2,800	10,000
5	244.14	25%	2,800	10,000
6	305.17	25%	2,800	10,000
7	381.46	25%	2,800	10,000
8	476.83	25%	2,800	10,000
Repayment of principal at the end of year 8				10,000

In order for this system to work, it is necessary that there be an objective index for the rate of inflation that will be acceptable to both the borrower and the lender. If such an index does not exist, then the system is inoperable. Furthermore, this system of indexation requires a lump-sum balloon payment at the end of the amortization period. This may be a serious problem to the borrower, but may be acceptable in that the overall price level (and presumably, the value of his house) has risen by 477% over the interval, and the equity position of the homeowner has been enhanced over the interval. The annual payments of the borrower are tied directly to the rate of inflation, and equal the inflation rate plus 3%. The lending institution has matched the income from its asset portfolio with the outlays on its savings deposit liabilities each year, as long as the rate of interest on savings deposits remains at about the rate of inflation (or the rate of inflation plus 1% or 2%).

A second form of indexation may also be used. The mortgage borrower

could agree to make annual payments equal to 3% times the ratio of the price index in that year to the price index in the year the mortgage was issued, and to repay at the end of 8 years the amount of the initial loan multiplied by the corresponding price ratio for the eighth year. The financial characteristics of this type of indexation arrangement are shown as follows, taking, as before, an initial mortgage loan of \$10,000 for a period of 8 years with a 3% real return to the lending institution:

<u>Year</u>	<u>Index</u>	<u>Ratio of the current index to the base index</u>	<u>Interest Payments</u>	<u>Loan Balance</u>
1	100.00	1.0000	300	10,000.
2	125.00	1.2500	375	
3	156.25	1.5625	469	
4	195.31	1.9531	586	
5	244.14	2.4414	732	
6	305.17	3.0517	916	
7	381.46	3.8146	1,144	
8	476.83	4.7683	1,430	
Repayment of principal at the end of year 8				47,683.

The return to the mortgage lender is the same as in the first case, except that the annual interest payments are significantly lower, and the lump sum payment due at the end of the period would be significantly higher. With this form of indexation there would be an incentive for the mortgage borrower to default on the loan before the final lump-sum payment is due at the end of the amortization period, unless the borrower were to put up a sizeable down payment, and unless the value of the home would increase at a rate equal to the rate of inflation. Clearly, neither of these two indexed systems are appropriate for use in third world countries.

ISSUES IN HOUSING FINANCE SYSTEMS

In the introduction it was noted that five sets of economic agents were major participants in housing finance systems in developing economies. Each set of individuals or institutions has a set of budget constraints that must be satisfied in order for the entire housing finance system to operate meaningfully.

Consider first the home purchaser. The amount of housing he can afford is limited by his income. One general rule has been that a household cannot afford to spend more than 25% of his monthly income on housing payments. As the Pratt-Weis monograph points out, this means that a prospective home purchaser can afford a house that runs in price between $2\frac{1}{2}$ and 3 times his annual income. If the government wishes to provide housing that exceeds this level, then some form of subsidization is in order. In addition, there is usually a down payment involved which would involve about a year's income. This would generally mean that a homebuyer would have to save, for example, 10% of his income at a 10% rate of interest for 4.2 years to make a 20% downpayment on a house equal to 2.5 times his annual income. For a house priced at 3 times annual income he would have to save 10% of his income for 4.9 years. These sorts of calculations must be made to be sure that the housing finance system does not violate the budget constraint of the prospective house purchaser.

The second set of economic agents that make up the system are the savers who provide the funds for housing finance. It may be possible to initiate a housing finance system through government subsidy or through external borrowing, but for long run survival, any housing finance system must rest on internal savings generated by the system. The second consideration, then, must be that the system must pay a rate of return on savings which will capture sufficient

savings to make the process viable in the long run. Generally, this means a nominal rate of return that exceeds the rate of inflation, and one that will allow successful competition with the other financial intermediaries in the economy.

The third major economic agent in the system is the financial intermediary which provides the link between savings and mortgage borrowing. This is one institution in the housing finance process that has been overlooked in the initiation of many housing finance systems in Third World countries. Too much emphasis has been placed on the mortgage borrower and the types of payments he can afford, without regard for the ability of the financial intermediary to survive within the framework of the system. There have been many cases where the government agencies involved in the housing finance process have worried too much about the borrower and not enough about the lender. If there is a relatively competitive marketplace, there will be a fine line to be drawn between mortgage borrower, saver, and financial intermediary in terms of the amount and timing of mortgage payments and savings flows in an inflationary economy, so that all three of them can survive over the long run.

It may be possible that no arrangement can be made in the private sector that will provide a satisfactory answer to the housing problem, due to the lack of a financial structure to capture savings, extreme poverty of the prospective house purchaser, or overly expensive housing due to the need to import a good part of the materials for building construction. In this case the government will have to provide a subsidy to the system. These subsidies can take a variety of forms. If the government feels that housing is of sufficient priority in the overall plan of the economy, it can use domestic taxes to finance housing construction. If the government has insufficient funds for housing subsidies, it can generate external loans for the housing finance

system. In order to do this, it must guarantee these loans by placing the full faith of the national government behind them. As a general rule, this takes the form of the central bank pursuing a role as a lender of last resort to the housing finance system. Any housing finance system must have the backing of the government, and particularly the support of the Central Bank and the Ministry of Finance. Without this support it will be difficult for individual savers to be induced to place their savings with financial intermediaries, whether these institutions be cooperatives, mutual savings and loan associations, or commercial banks. The operating financial organizations themselves must be under the regulation and supervision of a "caja central" or a central housing finance agency, which will provide individual financial intermediaries with liquidity support in case of unusual deposit withdrawals or other financial emergencies. This supervisory agency will not be subject to deposit withdrawal pressure, and will obtain its emergency funds from the Central Bank. The supervisory agency will also provide government or externally borrowed funds to the housing finance system if the government decides to pursue a policy of housing construction in excess of the amount that could be financed from domestic savings directly. In addition, the supervisory agency would operate to regulate the interest rate spreads between savings rates and mortgage lending rates, so that individual institutions are regulated to operate in the public interest.

After a housing finance system has matured to the extent that it has a well established base of mortgage borrowers and savers, the next stage in the housing finance system would be the development of a secondary mortgage market. The major function of such a market would be to increase the liquidity and marketability of mortgages, so that prospective mortgage purchasers would be able to sell them before they had reached the end of their amortization intervals. A well established secondary mortgage market would allow individual

housing finance intermediaries to sell off parts of their mortgage portfolios during periods in which they were experiencing net savings outflows. The development of such a market would make the housing finance system much less dependent on the Central Bank in case of financial disintermediation. The existing portfolio could also be sold to raise new cash to expand the housing finance system. Most Third World countries have very poorly developed capital markets, but even without a stock market or a bond market there is great potential for secondary mortgage markets if a basic and well developed housing finance system is already in place.

Another approach toward broadening the housing finance system would be in initiating small denomination mortgage backed savings certificates to tap the non-institutional market for housing funds. These small denomination instruments would increase the amount of domestic savings from lower and middle-income households, and increase the amounts of funds flowing to the housing sector. This would be particularly significant in rural areas of underdeveloped countries where savings are either zero or take the form of non-productive hoarding. The concept of mortgage-backed savings certificates is not new. "Cedulas Hipotecarios" are widely known and utilized in Mexico, Panama, Costa Rica and Columbia.

This secondary-market expansion of the housing finance system would lead to considerable economies of scale in housing finance. It would increase the scope of operations of individual lending associations and bring down the per-unit costs of financial intermediation, as well as developing new savings markets.

A final stage in housing finance for developing countries would be the initiation of an international secondary mortgage market, but this is likely to be a development that will only take place in the far distant future.

The problems of exchange rate risk and inter-country difference in real and nominal interest rates and inflation rates make the development of an international market somewhere well over the horizon. However, the Inter-American Savings and Loan Bank (BIAPE) has been somewhat successful in carrying out international housing finance programs.

Let us briefly return to the initial issue in housing finance in developing countries - the requirement that all participants in the housing finance system be able to work within their budget constraints. In addition, these participants are presumed to live in an economy subject to relatively high rates of inflation and to the possibility of extreme variation in the inflation rate. A conventional mortgage instrument, such as was discussed earlier, where the mortgage borrower makes equal nominal payments throughout the life of the mortgage, will be likely to violate the intertemporal budget constraint of the borrower. While his nominal income will increase rather sharply over the life of the mortgage, the traditional amortization/ ^{plan might} be unbearable in the earlier years (the American plan), or even worse (the European plan). A mortgage instrument must be designed which will make the increase in mortgage payments move with the rate of inflation, so that it is affordable to the borrower over the entire amortization period of the mortgage. However, in addition, the stream of mortgage payments must be sufficient to allow the financial intermediary to make a "normal" rate of return, so that it can pay a positive real rate of return to the savers in the system and remain in business. The following sections will consider the various types of variable payment mortgages which will satisfy the budget constraints of both the mortgage borrower and the financial intermediary.

VARIABLE PAYMENT MORTGAGES

More appropriate for use in developing economies would be the variable payment mortgage instrument.

Satisfying the requirements of the fine economic agents is a difficult task, but some mortgage instruments can be designed to enable a housing finance system to operate successfully with all of the sets of economic agents involved. In the last eighteen months in the U.S., mortgage lenders have been allowed to experiment with a variety of mortgages, and about 250 different kinds of mortgages have been introduced (none of them with universal appeal). There are only three major characteristics to a mortgage, however, and the wide variety of mortgages currently available in the U.S. are variations in combinations of these three major characteristics over time. Every mortgage

has, (1) a down payment; (2) an interest rate; and (3) an amortization period. Of course, in addition, there can be equity sharing between borrower and lender, as well as other agreements apart from the mortgage instrument itself. However, the major intertemporal variations on mortgages are reflected in changing interest rates, changing downpayments, and changing amortization periods. The major types of intertemporal flexibility in mortgages to deal with inflation and with the kinds of constraints on borrowers and financial institutions will be dealt with in following sections of this report.

The variable rate mortgage

Variable rate mortgages attempt to relate mortgage payments to the annual earnings of the borrower under conditions of inflation. Mortgage payment plans can be structured so that the payments start at a low level and increase throughout the life of the mortgage. One way of structuring this increase would be to set the rate of interest at a low level during the initial stages of the mortgage payment period, and allow the interest rate to rise annually over the life of the mortgage. Consider, as before, a \$10,000 loan with an 8 year life, and an interest rate which will average 12% over the full amortization period of the mortgage:

<u>Year</u> <u>End</u>	<u>Interest</u> <u>Rate</u>	<u>Principal</u>	<u>Loan Payment</u> <u>Interest</u>	<u>Total</u>	<u>Loan</u> <u>Balance</u>	<u>Required Growth</u> <u>Rate of Borrowers</u> <u>Income (%)</u>
1	8.5	923	850	1,773	9,077	-
2	9.5	972	862	1,834	8,105	3.4
3	10.5	1,037	851	1,888	7,068	2.9
4	11.5	1,124	813	1,937	5,944	2.6
5	12.5	1,235	743	1,978	4,709	2.1
6	13.5	1,376	635	2,011	3,333	1.7
7	14.5	1,554	483	2,037	1,779	1.3
8	15.5	1,779	276	2,055	0	0.9

Under this variable rate mortgage the annual loan payments start at \$1,773 per year and move gradually upward to \$2,055 per year. As with the conventional fixed rate mortgage, the annual principal payments increase and the annual interest payments decrease as the mortgage is repaid. The last column shows the required growth rate of the borrower's income in order that his annual mortgage payments be maintained at a constant proportion of his income. In this example, as would be true in general, the annual loan payments increase most rapidly during the early years of the loan and less rapidly during the later years of the loan. The second year payment increases 3.4% over the first year payment, while the eighth year payment increases only 0.9% over the seventh year payment. Most households find that their incomes are rising most slowly in their early years when they are contemplating a house purchase, so that the variable rate mortgage may violate their budget constraint in the earlier years of mortgage payments. This is a major shortcoming with the variable rate mortgage which can be overcome by utilizing the rollover mortgage.

The rollover mortgage

The rollover mortgage overcomes the major objection to the variable rate mortgage, in which the most rapid increase in payments come at the initial stages of mortgage repayment. With the rollover mortgage, an interest rate is set which increases the mortgage payments at a rate equal to the anticipated annual rate of increase in the income of the mortgage borrower. Rather than starting with an arbitrary change in the interest rate, as was done with the variable rate mortgage, the rollover mortgage sets a required rate of growth of borrowers income and determines the interest rate as a residual. Taking the same \$10,000 loan with an amortization period of 8 years, we now set a rate of interest which will make the rate of growth of annual loan payments

equal to a predetermined rate of growth of household income. Assume, for example, that we expect household income to grow at 5% per year and we wish the interest rate, as before, to be 8.5% over the first year of the mortgage.

We obtain the following interest rate and payment schedule:

<u>Year</u> <u>End</u>	<u>Interest</u> <u>Rate</u>	<u>Principal</u>	<u>Loan Payment</u> <u>Interest</u>	<u>Total</u>	<u>Loan</u> <u>Balance</u>	<u>Required Growth</u> <u>Rate of Borrowers</u> <u>Income (%)</u>
1	8.50	923	850	1,773	9,077	-
2	9.96	958	904	1,862	8,119	5
3	11.65	1,009	946	1,955	7,110	5
4	13.62	1,084	968	2,052	6,026	5
5	16.03	1,189	966	2,155	4,837	5
6	19.07	1,340	922	2,263	3,497	5
7	23.13	1,567	809	2,376	1,930	5
8	29.27	1,930	565	2,495	0	5

An interest rate has been calculated which is the rate required to have the total annual loan payments increase at 5% per year over the life of the mortgage. This is a stream of payments calculated to require a constant proportion of a mortgage borrowers income to make these payments, where income is assumed to rise at 5% per year. Just as there was a major flaw in the variable rate mortgage, because loan payments increased most rapidly in the earliest years of the mortgage, there is a major objection to the rollover mortgage. This flaw results from the fact that the interest rate reaches very high levels in the later years of the loan. When we started at a predetermined 8.5% rate, the calculations show that the rate of interest rose by 244% over the life of the loan, rising to 29.27% during the last year of the loan. The average rate of interest paid over the life of the loan was 16.4%, which would satisfy the target of having the annual payment rise 5% per year over the life of the

mortgage, but would be too high an average interest rate for the lending institution to achieve a normal "markup" profit. To overcome this objection, the rollover mortgage must be adjusted to make the average rate of interest over the life of the loan equal to a rate which will provide a "normal" profit to the lending institution.

The adjustable rollover mortgage

The basic problem with the rollover mortgage was that the rate of interest reached very high levels in the later years of the loan. The rollover mortgage can now be adjusted to make the average rate of interest over the life of the loan set at any particular level. Assume, for example, that we wish the average interest rate to be 12% over the entire life of the mortgage loan. Continuing the example given for the rollover mortgage, we adjust the rates by multiplying each interest rate for each year in that table by 12% divided by 16.4%, or by a coefficient of 0.7317, and then solve for the annual loan payment that accompanies the new interest rate. The solution would be as follows:

<u>Year</u> <u>End</u>	<u>Interest</u> <u>Rate</u>	<u>Principal</u>	<u>Loan Payment</u> <u>Interest</u>	<u>Total</u>	<u>Loan</u> <u>Balance</u>	<u>Required Growth</u> <u>Rate of Borrower's</u> <u>Income (%)</u>
1	6.22	1,002	622	1,624	8,998	..
2	7.29	1,031	656	1,687	7,967	3.8
3	8.52	1,072	679	1,751	6,895.	3.8
4	9.97	1,130	687	1,817	5,765	3.8
5	11.73	1,211	676	1,887	4,554	3.8
6	13.95	1,325	635	1,960	3,229	3.8
7	16.92	1,489	546	2,035	1,740	3.8
8	21.42	1,740	373	2,113	0	3.8

With the adjustable rollover mortgage instrument, the major objections to the variable rate mortgage and the simple rollover mortgage have been overcome.

In the example, the mortgage payments have been set so that they will rise a constant 3.8% per year over the life of the mortgage, and the average interest rate over the life of the loan has been prespecified as well. Once the markup margin for the lending institution and the rate on savings deposits is specified by the structure of the economic system, and the average rate of inflation of prices and/or incomes is specified for the economy, then the adjustable rollover mortgage can be tailored to this particular set of circumstances. This type of mortgage instrument is well suited to the economy of a developing Third World country, where interest rates are subject to drastic change, and where the rate of inflation is significant.

The payment capped adjustable rate mortgage

Various sorts of adjustable rate mortgage instruments have been examined. One final twist could be to take whatever adjustable rate mortgage instrument that has been selected and fix the monthly payments of the mortgage borrower to the lending institution at specific intervals of time. For example, the lending institution, for ease in calculating payments as well as for the convenience of their mortgage lenders, may wish to have monthly payments fixed for anywhere from half a year to two or more years, so that their customers get used to a fixed monthly payment. Any difference between the terms of the flexible rate mortgage already agreed to between the lending institution and the mortgage borrower, and some set pattern of fixed periodic payments can be debited or credited to the mortgage borrower's account. If the mortgage instrument is "capped" in this manner to avoid making adjustments in the periodic payments too often, the loan in question may be subject to positive or negative amortization. Negative amortization is commonly defined as a situation when the periodic loan payment is insufficient to fully pay the periodic interest due on the loan. In this case, an "Unpaid Accrued

Interest" account could be created for the mortgage borrower at the lending institution. The total of this account would increase, for example, each month that the monthly payment is insufficient to pay the current interest amount. The monthly payment would then fall into two categories. It would first be credited to the unpaid accrued interest account, and the remainder of the payment, if any, would be applied to the principal balance. Alternatively the unpaid accrued interest could be debited from an escrow account, or from a tied savings account held in connection with the mortgage loan. With the "capping" of variable rate or variable payment mortgages, fewer changes would need to be made in the periodic payments on the mortgage loan.

CONCEPTS OF

SITES AND SERVICES

Readings and Reference Materials

by G. Rivkin

Contents

- I. Outline of Presentation
- II. Notes on Design Principles in planning the sites and services project and the dwelling unit for low income families. (If desired, notes from the main Workshop presentation on sites and services could be substituted here.)
- III. Overview paper which introduces concept and applications of sites and services approach: The World Bank, Sites and Services Projects, April 1974.
- IV. Excerpts from a report by Praful C. Patel, "Site and Services Projects Survey Analysis of Urbanization Standards and On-Site Infrastructure", 1974. This was a study undertaken to provide background information and guidance (for World Bank staff and others who are involved) in planning of urban projects. It is particularly good in illustrating cost implications of alternative standards and in presenting comparative data from the sites and services experience of a number of different countries.
- V. Several numbers of The Urban Edge, included here for their coverage of issues in planning "affordable" infrastructure, "appropriate" technology and project implementation.
- VI. Material on alternative sanitation technologies from a report of the Central Projects Staff, Energy Water and Telecommunications Department of the World Bank: Richard Feachem, D. Duncan Mara and Kenneth Iwugo, P.U. Report No. RES 22, Alternative Sanitation Technologies for Urban Areas in Africa, February 1979.
- VII. Studies done for USAID PRE/HUD in 1980 by Dr. W. Paul Strassman of Michigan State University on employment generation in sites and services projects, "Employment Generation through Building" and "The Role of Infrastructure in Employment Generation". These two short pieces, based on data from project experience in several different countries, present an interesting analysis of the relation between various components of project cost and jobs created in their implementation.

Outline

Presentation of Sites and Services Reference Packet (one-half hour)

I. Objectives of the Presentation

- A. Introduce selections in packet of supplementary readings.
- B. Relate these selections to the Shelter Training Workshop themes:
 - 1. Affordability (emphasis primarily on project design, e.g. standards, alternative technologies and staged upgrading for infrastructure, et al but some illustration of other measures as described in the affordability session.)
 - 2. Cost Recovery (issues for implementation and importance to project replicability)
 - 3. Institutional Development (aspects as a component of the sites and services project; replicability, a central challenge for the future)
 - 4. Public Sector/Private Sector Roles (employment generation aspects of the sites and services project, accommodating in project site planning, working toward expanded role for the private sector)
 - 5. Upgrading (examples of relationship between sites and services and upgrading projects)
- C. Relate the reading materials to the main Workshop presentation on sites and services.

II. Review Some General Principles in Sites and Services Planning

- A. Site selection (if not covered separately elsewhere in the Workshop)
- B. Design of the dwelling unit
- C. Design of the sites and services project

Agency for International Development
Shelter Training Institute

Design Principles in Planning Sites and Services
Projects for Low Income Households

Objectives of the Session:

Introduce principles of design of sites and services projects for low income housing, particularly with respect to economy and efficiency of site layout, infrastructure, and the dwelling unit itself.

Describe the analytic process and key design decisions which determine the form of projects, their scale, and standards for utilities, services and dwelling units. Discuss how priorities may be established.

Show how different approaches and design solutions emerge out of consideration of a given country's climate and culture as well as conditions of a particular site such as topography or land use relationships.

Illustrate these points with project examples from El Salvador and speaker's research findings.

Subjects:

A. Design Considerations

1. Densities - in relation to project scale, location (access to employment and services), climate, social or cultural characteristics of the people, plot sizes, dwelling unit features, size of neighborhood or social groupings; families per hectare as the measure.
2. Nature of infrastructure - (water, sewer, drainage, electricity, roads and footpaths), respecting range of possible standards and acceptable alternatives, progressive development, access to individual lots, connections to larger municipal systems; units of measurement.
3. Community services and facilities (health, education, welfare, recreational, religious, commercial, solid waste or garbage disposal)
4. Special physical issues (topography, existing amenities, context, topography, views), or special climatic considerations.
5. Techniques for relieving monotony.

B. Other Considerations that Bear on Design

1. Trade-offs and compensation (e.g. reduction in some standards to save money that could go instead to some higher priority services). Process of analyzing alternatives, weighing the allocation of resources, staying within project cost constraints established on the basis of affordability, replicability.
2. Self-help vs. contract labor.
3. Maintenance requirements and indigenous materials.
4. Incremental staging of development infrastructure (unserved plot, partially, then fully served plot) and dwelling unit (sanitary core, core house, house expansion and embellishment); transformation of raw, untidy appearance over time; what can be left "undesigned".
5. Acceptance issues and identification of needs for innovation and bring research and development efforts to bear on such needs.
6. Economies of scale in construction; standardization of components.
7. Importance of the residents' initiative as well as contributions of construction labor.

Agency for International Development
Shelter Training Institute

General Principles to Consider in Decisions on
The Design of the Dwelling Unit for Low Income Families

For a long time, shelter projects have emphasized architectural solutions. Although some attractive products have resulted, it is clear that they cannot continue to have a central role in shelter strategy for low income households. These projects typically require major subsidies for low income occupants. Given the scale of need in light of today's rapid urban growth rates, a nation's limited resources must be spread more widely and achieve significantly greater impact. A better approach is to concentrate on basics.

- A. Meet the target group's basic shelter requirements.
 1. Typical living standards prevalent for the target group (densities, structures, building materials, adaptation to climate, accessibility to employment opportunities, shelter, utilities, transportation expense).
 2. Household size and composition, economic social and cultural activities associated with the dwelling unit itself, the residential environs.
 3. Priorities respecting the dwelling, infrastructure, community facilities and services, other social or economic needs.
- B. Recognize and make full advantage of the target group's energies and capacity for taking initiative in providing shelter for itself.
 1. Ascertain most serious constraints, e.g. insecure tenure; excessively restrictive land use and building codes that inhibit use of local materials, gradual improvement/expansion of the dwelling unit, installation of infrastructure in incremental stages over time, occupation of sites in locations convenient to employment or services, etc.
 2. Establish opportunities for active participation of the target group in all project phases--from initial design through construction and eventual maintenance and upgrading.
- C. Recognize the principle of target group affordability as a primary cost constraint from the outset of the design process.
- D. -Fundamental decision.
 1. Devise mix of dwelling unit design solutions most appropriate for target groups (in respect to cost, functional, staging criteria and flexibility in future use).

2. Select most suitable building materials (with regard to availability, need to stimulate production of local substitutes for imports, acceptability of innovations, ease of transport and on-site handling, cost to the target group family, comfort--there may be conflicts among some of these criteria and a need to weigh the relative merits of the alternatives. -

3. In conjunction with the decisions on materials, outline construction system and procedures (considering availability of skills, training and supervision requirements, staging).

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(Draft for Discussion Purposes Only)

**A REVIEW OF UPGRADING:
OPPORTUNITIES; APPROACHES; AND ISSUES**

Prepared for the USAID Shelter Workshop

November, 1982

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Appendix A: Example of Affordability Presentation

Appendix B: Example of Physical Surveys for Upgrading

I. Introduction

Upgrading is a way to provide existing urban neighborhoods with the facilities and services needed to ensure a minimally decent level of human existence. It is also a way to enlist the energies and resources of people themselves in improving the quality of their shelter. The U.S. Agency for International Development considers upgrading an effective approach in efforts to expand the supply of acceptable living environments for low-to-moderate income families, and regards it as one of the principal means of assisting shelter programs throughout the developing world. The World Bank and other international assistance agencies share this view and similarly allocate resources to upgrading activities.

Adaptable in a wide variety of situations, upgrading has been outstanding for its record of transforming basic living conditions for large numbers of people. In this respect few other housing approaches have had comparable impact -- with a minimum of subsidy, and a minimum of social disruption.

The main strength of upgrading is its focus on existing neighborhoods where people can remain while the improvement works take place. Few are dislocated; and as their environment improves, the residents have an impetus to improve their shelter units as well. Many have demonstrated eagerness to upgrade their living quarters, little by little as resources permit, especially when their tenure is secure.

Independence to pursue this incremental evolution of decent living conditions is preferable to forced relocation and dependence on housing "projects" that others must provide. The people's sharing of responsibility for adequate shelter production should be particularly appealing to governments, who face enormous development challenges with limited resources. Upgrading is a means to achieve desired ends of public policy -- in this case improved shelter stock -- with a minimum of strategically-placed government investments and a maximum of independent contribution by the beneficiaries themselves.

Upgrading does not work in all circumstances. It is, moreover, extremely difficult from an operational standpoint to implement successfully. There is a high premium on organizational skill and coordinated public action. It is certainly not an effort to launch without careful advance planning and a commitment to effective management. There is also considerable reluctance on the part of many governments to accept the concept of investing in marginal, often squatter, neighborhoods.

Nevertheless, experience over the last decade with projects in every major region of the world have taught us much about how to do upgrading. We have learned about conditions under which it works better (and less well), and about problems that agencies undertaking upgrading programs and projects should be prepared to encounter and address.

Insights from this experience with upgrading are highlighted in the pages that follow.

II. What Upgrading Is

No two upgrading programs are exactly alike. The most effective have stemmed from careful study of the community to be improved and its needs; from careful selection of the specific facilities and services feasible for effectuation; and from careful planning with the residents on what and when improvements will be undertaken.

The actual improvement programs may vary but most, like the "kampung" improvements pioneered in Indonesia include basic infrastructure -- piped water supply, sewerage, grading and paving of certain roads. Where frequent and heavy rainfall creates special problems (as in Indonesia, Thailand and Ivory Coast) stormwater drainage, erosion control and paving of footpaths may likewise become basic project components.

Beyond these "essentials", there is a rich variety of activities that have been tried. Some examples:

Peru's Aid-assisted upgrading program involves a process that begins with preparation of a neighborhood plan showing the array of proposed physical "actions"; public open space, community facilities, vehicular and pedestrian rights of way, and lot boundaries. Based on the area plans, responsibilities for grading and paving the streets and sidewalks, for installing the water, sewer and electrical lines and for building the various public buildings programmed are divided among arms of the central government, municipality and parastatal utility companies. In Peru, residents become eligible to receive formal award of tenure on their lots as a last phase of the process, when the neighborhood physical improvement program has been completed.

Korea's effort for Seoul also included preparation of a neighborhood plan and delineation of individual lots as the basis for awarding tenure. Parks and recreation facilities were designated for leftover, odd-shaped parcels unsuitable for building houses.

For many upgrading projects garbage collection stations are components of the program, and community facilities such as health posts, schoolrooms, community centers, parks and recreation are also included.

The Philippines' Tondo project is one of the most extensive, affecting thousands of families in Central Manila. Its fairly elaborate program included reclamation of certain low-lying areas subject to drainage problems, and preparation of neighborhood subdivision layouts in consultation with the residents. This process, called "re-blocking", involved demarcation of public rights-of-way, sites for future community facilities and individual plot boundaries which would eventually be the basis for providing services and for granting tenure to the occupants. The densely-developed squatter neighborhoods willingly cooperated in the reblocking, even though it meant major dislocation in certain blocks. For by and large the neighborhoods remained intact, even though essential public services required some displacement.

In Tunisia's AID-supported Mellassine project, social services and activities to stimulate economic enterprise are integrated into the neighborhood upgrading scheme. Mother and child health programs, nutritional information, vocational or literacy training, and technical assistance in support of loans to small business are examples of the supplemental efforts that have been mounted.

In Lima self-help school classroom and bathroom construction has been incorporated into some of the projects, plus community extension services from the Ministry of Agriculture which offer residents plants and advice on "reforestation" and breeding of small stock as nutritional supplements.

One of the most important components of an upgrading project can be low-interest, long term loans for home improvement. These loans augment the beneficiary families' capacity and desire to upgrade their dwellings along with the larger neighborhood improvements. AID is making special efforts to include home improvement loans in those neighborhoods where leasehold or ownership tenure exists or is conferred as part of the project.

Sites and services projects on nearby land may also be planned in conjunction with neighborhood upgrading. These often have the express purpose of serving families who choose to resettle out of the neighborhood or find themselves forced to move when lot boundaries are redrawn or infrastructure is installed, as occurred in Tondo.

In some of the upgrading areas -- notably Jakarta -- one result of upgrading has been reduced overcrowding in densely developed neighborhoods. By contrast, a key objective of the Abobo Gare project in Ivory Coast -- is to increase density in a neighborhood where existing shelter is both poorly serviced and scattered. In this case, increased density will expand rental opportunities for low income tenants. It will also permit many owners to expand single story units into multi-story walk-up apartments, thereby generating increased income that can be taxed to help defray the cost of installing utilities.

Although the range and variety of components that comprise up-

grading projects can be quite wide, there lies at the heart of each country program the fundamental objective of "catching up" with the backlog of need to provide basic infrastructure for the growing urbanized area.

Within ten years almost two-thirds of Jakarta's slum areas (where 80 per cent of the city's population live) have been improved through extension of infrastructure services. In Lima, Peru, more than 300 of the "pueblos jovenes" (young towns, as the squatter areas are called) have been designated for upgrading in a major program of 20 years' running to provide them with basic infrastructure. The benefits of Honduras' upgrading program will eventually reach 700,000 to 800,000 people in that country's two largest cities. The total number of plots expected to benefit through Botswana's commitment to upgrading as of 1981 was estimated at a number equal to almost 30 per cent of that country's housing demand over the last decade. Thailand is building on the successes of its first upgrading projects to place highest priority on neighborhood improvement in Bangkok. It plans to upgrade neighborhoods containing 30,000 dwelling units in five years.

III. Context and Rationale

A. The Context

The primary goal of shelter policy and programs -- and the focus of this entire Workshop -- is improved living conditions for the largest number of people. However broadly this goal may be defined, it means fundamentally the expansion of acceptable shelter in suitable living environments.

Today urban growth in virtually every part of the developing world has outpaced the ability of the formal sector to build urban housing and its supporting infrastructure systems. We do not need to belabor the reasons. Rural-urban migration and natural increase of the urban population have, moreover, swollen the need side of the equation. Incomes are low and low-income households are numerous.

The litany of problems is familiar by now: the whole system for supplying urban housing is not able to produce at the scale and rates of speed that have become necessary, or at the price levels that these many new urban households can afford. Regulations and standards build in added costs. Subsidized housing for specific groups swallow available government resources long before more than a fraction of the national need is met. Issues of land speculation, price, availability and tenure conditions add further complications.

The results, of course, we have all seen: families managing for themselves somehow -- crowding into old, run-down structures originally meant to accommodate many fewer; others squatting in whatever space they can find at the urban fringe or in pockets of marginal land amidst developed parts of the cities. In helter-skelter fashion the families put up shacks of whatever materials they can find. The settlement areas usually lack acceptable sanitation and readily accessible sources of drinkable water or, in cases where these basic items of urban infrastructure are present, the systems' capacities are seriously exceeded.

Sometimes the squatter settlements are highly organized, with the community members themselves providing mutual support. Sometimes the settlements are not squatterments at all but neighborhoods on leased or owned land, substandard and illegal mainly because they lack public water and sewer line connections.

As solutions to the problem of securing shelter, these various settlement types demonstrate some extraordinary resourcefulness and energy on the part of those who create them. Unfortunately, they also present some very serious public health problems -- not only for the residents but for the larger community. Even though the inhabitants of these neighborhoods suffer most from the poor conditions of their living environment, general health and safety are also threatened by raw sewage overflowing undersized pipes, mosquitoes breeding in standing pools of water where drainage is inadequate, piles of accumulated garbage or the acrid odors of open trash burning and the steep-sided ravines eroded by years of heavy rainfall.

An early strategy of governments in responding to these problems was often to demolish the marginal settlements and replace them with "proper" housing. The results of this approach were universally disappointing. Only a small proportion of the original residents from the cleared neighborhoods could be rehoused. The rest who were displaced added further to the crowding in other, existing marginal areas or moved on to turn new areas on the urban fringe into squatter settlements. The social fabric of communities that had developed sometimes over twenty or thirty years was torn, and the product of many families' efforts and investments -- cumulatively substantial though individually small, was destroyed.

Though applied with the intention of moving a step forward, the clear-and-rebuild approach proved to be a movement backward. Demolition and relocation efforts of the Philippines, Tanzania, Brazil, Kenya, India -- and other countries that have tried them over the years have neither added to the inventory of adequate shelter nor discouraged the continued formation and growth of squatter settlements.

The number of households actually helped through these efforts, have been relatively small in comparison with the numbers who received no benefits at all and, indeed, may have found their living conditions worsened. Political protests followed many of these attempts at clearance and relocation. Indeed, one of principal reasons why countries have by-and-large ceased to demolish and resettle has been the fear of growing civil disturbance if the practice continued.

A revised approach for dealing with marginal settlements has clearly been needed. The situation calls for policy and action guided by several very basic considerations, and it is in response to these that upgrading programs have evolved.

B. The Rationale

A number of considerations can be advanced in support of upgrading:

1. Greater efforts in the shelter field are needed that concentrated on the households least well served by existing housing construction programs, i.e. people whose circumstances led them to settle in the marginal areas, for the most part people at the bottom of the income ladder.

2. In the interests of environmental health, public order and community stability, approaches are needed that can be implemented in the short run to produce real benefits for large numbers of households fairly quickly.

3. Heavy housing subsidies can not be sustained. It is better to spread available resources by offering limited help to a much broader spectrum of families than more elaborate housing to a relatively few. Indeed, it is preferable to have schemes in which investment resources can be "recycled". If beneficiary households pay for the improvements they receive, even in small amounts over long periods of time, then the

funds for shelter programs can be replenished and reinvested for the benefit of additional households.

4. Government can do only so much. Private resources and the energies of individual families should be relied upon to the greatest possible extent. Existing community organizations, too, should have a role in the effort.

5. An effort is needed to provide adequate shelter by building on the base of the existing housing inventory. There has to be an alternative to tearing down neighborhoods and moving people around like so many blocks. The costs in human inconvenience and social disruption -- like the costs in time, capital and administrative resources -- are simply not supportable on a long-term basis.

6. Poor housing and lack of utilities are the most obvious symptoms of deeper economic and social problems in marginal neighborhoods. Efforts to improve the physical surroundings could become the vehicle in which social services and economic development assistance are also introduced as part of more comprehensive approaches to deal with urban poverty and despair.

Upgrading programs have not been adopted without resistance, however. Indeed, upgrading has often been extremely controversial. Some government officials argue that upgrading perpetuates slums and encourages further squatting, and that government-sanctioned programs should match the higher aspirations of the countries' people. Opponents of upgrading schemes may hold that cost recovery is politically infeasible or ideologically inconsistent . . . at best, very difficult. They may point to other, perhaps more economically productive, alternative uses for specific pieces of centrally-located land occupied by marginal settlement. Where squatters have occupied government-owned land, there are questions raised about other, competing public needs for the land and when privately-owned land is involved there are questions of adequate compensation for the land owners.

In many cases difficult site conditions make the installation of infrastructure expensive and the settlements are frequently in places subject to geophysical hazards — landslides, earthquakes, or severe flooding. Actually, upgrading may not be the best treatment for all marginal settlements in all cases.

Even some who acknowledge the rationale for upgrading believe this is not good long range policy for accommodating urban growth. Their priorities for governmental action favor planning and servicing raw land for residential development in locations accessible to employment opportunities. Often, however, it is possible to do both.

Many of the counter arguments are persuasive. Understandably, it is difficult for officials to settle for solutions they fear compromise their values. If improved shelter is to be national policy, however, it is important to weigh the factors in favor of upgrading and carefully to compare its costs and benefits, timing and potential impacts against those of available alternatives. Perspectives shift when upgrading turns, on balance, to offer more impact for the money, greater feasibility or more direct benefits to particular segments of the target group than other approaches. Those countries which have tested, and subsequently expanded, upgrading into a full-blown component of shelter and urban development policy can testify to its value.

IV. Operational Aspects of Upgrading

A. The Initial Commitment

Countries adopt upgrading as part of shelter strategy for a variety of reasons; political pressure from neighborhoods restive for improved conditions, recognition that subsidy of new shelter will have limited impact, difficulty in locating sites for substantial quantities of new shelter regardless of financing, policy commitments to spread shelter expenditures between both new and improved housing areas, etc.

Regardless of the impetus, it is extremely helpful for national governments to perform "affordability" studies as part of shelter strategy formulation before initiating an upgrading program. Affordability analysis is a means of arraying information on incomes against various kinds of shelter solutions. Given necessary assumptions on proportions of household expenditures that can be spent on shelter and on available financing, affordability studies can indicate what kinds of physical solutions--ranging from new housing of various types, to upgrading, to nothing at all--households at various income levels and locations can afford before any consideration of subsidy.

An example of an affordability presentation, for Swaziland, is attached as Appendix A. It provides a perspective on the scale of population which can be benefitted by an upgrading approach. It also provides a framework for relating upgrading to other physical approaches (e.g. sites and services, construction of core housing) that can realistically be attempted within a country's shelter strategy.

Other preliminary studies should also be undertaken before determining the precise locations and forms for upgrading activity: diagnosis of the range and variety of infrastructure and services needed to bring neighborhoods up to a basic standard of livability; evaluation of the tenure situation of residents in marginal neighborhoods (owners, renters, squatters) ; identification of entities (both public and private sector) responsible for providing facilities and services.

Finally, there should be a realistic assessment of the level of resources available for an upgrading effort, especially for an initial pilot program that can test the nation's ability to perform. These estimates should include:

--funds available for both capital and recurrent costs, from national institutions and foreign lending agencies.

--funds available from the beneficiaries themselves, that is to say, how much cost recovery can be expected and what system can be devised to obtain payments on a regular basis regardless of how small those payments might be.

At this point, decisions on extent of subsidy, if any, can be appropriately addressed and a specific pilot program designed.

B. Site Selection

Political considerations figure prominently in the choice of site or sites for an upgrading effort, especially the initial pilot undertaking. Nevertheless, it is extremely helpful to establish criteria for site selection to guide the political decisions. For the very location of a project area, the tenure and income characteristics of its residents, the strength of local community organization will all become principal factors in project success. Some basic considerations are:

1. Sites should, in relation to the overall pattern of urban development and surrounding land uses, be good residential locations for the target group, i.e. accessible to public transportation, jobs, community facilities and commercial areas.

2. Sites in areas subject to regular flooding, mudslides, earthquakes or other geophysical hazard are--if there is a choice--not suitable for permanent settlement and should not be selected for upgrading. However, other conditions which may make installation of infrastructure costly such as steep slopes, subsurface rock, unstable soils, etc. should not, alone, be the basis for excluding a given site from attention. In some cities, these are the only options for informal settlement.
3. Costs of off-site infrastructure work should be minimized by selection of sites closest to existing major infrastructure trunk lines (e.g. roads, water, sewer, etc.). Assuming there is additional capacity in these systems, nearby communities merit priority over more distant neighborhoods where costly trunk extensions would be needed before any work within the neighborhood could begin.
4. The existing tenure pattern is important. Whether the inhabitants are squatters, owners, renters or combinations of these, relative availability of land records and willingness of landowners (whether government or private) to participate in a regularization of tenure for the occupants are critical factors in ultimate success.
5. Existence of a cohesive community or a community organization desirous of an upgrading project and capable of supporting it will be important factors in implementation that requires resident participation.

Korea established some specific criteria in identifying sites for its successful upgrading projects:

At least 70 percent of the land had to be publicly owned. Where private land was included, assessments were to be made on those parcels to recuperate costs of upgrading the infrastructure.

Infrastructure improvements could not require demolition of more than 15 percent of the neighborhood's existing dwelling units.

The need for replacement housing (beyond requirements to accommodate households displaced by infrastructure improvements) should not exceed 10 percent of the remaining stock of units.

Required off-site infrastructure improvements should be no more than 5 percent of estimated overall infrastructure costs for upgrading the neighborhood.

Based on preliminary socio-economic surveys, at least 90 percent of the neighborhoods' households should have incomes below the city's median.

The costs of infrastructure improvements to the area had to be recoverable by land sales at prices that enabled at least 90 percent of the resident households to afford the plots they occupied. Municipal revenues from these lot sales were to be the basis for repayment of the loans that financed the infrastructure.

Korea's program of squatter upgrading was undertaken in context of national land use and housing policies which emphasized high-rise, high density multi-family apartment construction to achieve the greatest possible intensity of urban land use. Upgrading was applied to residual pockets of land where displacement for such transformation did not appear socially or politically feasible.

By way of contrast, Peru's commitment to upgrading was elevated 20 years ago to be a major component of that country's shelter policy. It deals with informal settlement in several types of area: pockets scattered amidst other central city development, squatter invasions at the urban fringe, and areas originally established as temporary shelter for disaster victims but now pressed into permanent service. Neighborhoods excluded from potential improvement under the "pueblos juvenes" upgrading are those subject to severe geophysical hazards.

Newer marginal settlements ("invasions") that have come into existence since the upgrading program was promulgated lack official recognition. Consequently they are also excluded from treatment at this time. In Peru, existence of active community organizations capable of promoting resident participation has been an essential factor in assigning priorities to individual neighborhoods. This has been a necessary mechanism for actively promoting residents to sign up for infrastructure connections and for gaining their commitments to payment.

Potential cost recovery has also been a factor in site selection for upgrading in the Ivory Coast. Abobo Gare, the major Abidjan project, is almost entirely on land owned by people whose ownership title can be readily documented. Most of the many thousand residents are renters. Renting will continue after the upgrading work is complete, but the owners will be assessed the improvement charges for the upgrading work.

C. Project Planning and Design

Upgrading is an extremely complex activity that has to be orchestrated carefully. In many respects it is much more complex than building new dwelling units in new neighborhoods on undeveloped land. The components and sequencing of an upgrading project need to be thought through in advance, and there is a heavy premium on adequate project planning. Two basic steps are involved: initial physical and social surveys and project design.

1. The Surveys

Careful and complete physical surveys are the first essential. The neighborhood must be mapped and its characteristics delineated: topography, existing dwellings and their conditions, existing utilities, etc. Aerial photographic surveys supplemented by detailed on-site investigation are the usual means of recording and analysis. Appendix B provides an illustration, from Turkey, of the types of physical surveys needed in advance for an upgrading area.

The social-economic survey of area residents is equally critical. By now most countries have available teams of resident interviewers (from universities or consulting groups) who can design and carry out survey work. It is important to utilize such local teams, because of their ability to establish the rapport with neighborhood residents. The questions to be asked will often touch sensitive nerves, and confidence in the interviewers is critical. Among the items of information to be sought are:

numbers of residents and household composition; status of land ownership and household tenure; economic activity of all household members and income generated from all sources including rental payment of tenants; current shelter costs including unit rentals or ground rent; other fees or property taxes paid if any; expenses for water, electricity, garbage collection or other services paid for; investments in building materials and labor represented by present shelter; desire and willingness of households to pay for infrastructure improvements (eg. connecting to a public sewer); desire and willingness of households to make improvements in their dwelling or to expand it; perceived problems in the area and residents' preferences on project priorities.

If possible, the interview program should provide the residents with a picture of what types of improvements given sums could buy and what various trade-offs among improvements might be.

Residents of an upgrading area should be allowed to choose as much as possible from among alternative project elements, with understanding of the budget trade-offs involved. In numerous Peruvian pueblos jovenes, for example, residents expressed preference for electricity and street lights over individual piped water connections. Their argument: even though water purchased from itinerant sellers cost more than they would have to pay for piped water, electricity could not be trucked into the neighborhood and was therefore their preference.

These types of survey data are important, both for project design and for the long-run need to monitor and evaluate project performance in inducing change.

Lack of such survey data could affect project performance. For example, evaluators of one Central American upgrading project observed that the original use of simple rules of thumb regarding percentage of income that households could afford to pay had misled planners into overlooking additional costs implicit in even minimal shelter solutions. Accurate estimates, based on survey data, should have taken into account the combined costs of financing home improvement loans, for example, together with: dwelling improvement investment, user fees for the improved services, plus the municipal surcharges which were the means of financing the infrastructure improvements. In one Panamanian project, for example, two years after completion of a new sewage system, fewer than 25 percent of the households with access had connected their dwellings. The costs of indoor plumbing were prohibitive, and the ones who had made connections had financed them out of savings.

2. Project Design

Once the survey information has been analyzed, a project plan is prepared. In designing the plan it must be recognized that upgrading takes time and requires a sequence of actions which must follow each upon the other in some orderly fashion. A physical plan for an upgrading neighborhood should illustrate a series of stages in which the implementing measures are identified. (Failure to do this has been one of the problems facing Tunisia's Mellassine project. See below.) In preparing the upgrading plan it is better to keep the physical elements as basic and as simple as possible, even if they are restricted to minimal infrastructure (water, sanitation, access improvements, and drainage). Apart from affordability considerations, project designers should recognize that administrative requirements are often new and unfamiliar, difficult enough without compounding problems of coordination. It is in the planning stage that the more complex elements of a possible project--e.g. social and economic development services, relocation of families, etc. should be thought through and their financing and implementation assigned.

Above all, it is important not to promise the residents of the upgrading neighborhood more improvements than can realistically be delivered. The people must not suffer from unfulfilled expectations.

At the same time work should be initiated to help residents understand the importance of their payments in the scheme, precisely what those payments are to cover and what penalties will follow if there is failure to pay. Families should not, for example, be led to believe their monthly service payments are buying them tenure (as happened in a Botswana sites and services projects) if this is not the case. On the other hand, the burden is on the government to establish implementing mechanisms for the upgrading effort which can deliver on what is promised.

D. Cost Recovery

If upgrading is to have either long term or widespread effectiveness as a means of resolving a society's shelter problems, cost recovery measures need to be built into project design from the outset. Basically, people will pay something..if not the whole amount..in return for reliable municipal services. In general, where cost recovery has been a problem, it has not been because the beneficiaries were unable to afford payments. In some cases, the residents have not clearly understood what was expected of them and how payments relate to project benefits. Sometimes payments were linked to expectation of services, and when those services were not delivered, area residents withheld payments.

Costa Rica was one country in which upgrading proposals were not implemented because cost recovery was a major issue. The first problem was the complexity in the form of valorization tax proposed. The more major problem was a perception by the decision makers, that poor people would object to carrying the full costs of improvements for their neighborhoods, when middle and upper income residents in other neighborhoods were getting by without such levies. Clearly, equity in levying service charges or taxation will be a major stumbling block to cost recovery programs involving the poor.

Successful cost recovery requires more than an equitable scheme, however. The responsible authorities must maintain accurate, up-to-date records and take on a full commitment to make efficient collections. This includes willingness to impose penalties and take other measures in cases of delinquency. When water or electric service is cut off for non-payment of charges the relationships are immediately clear.

There is a great variety among successful cost recovery schemes. Some examples:

In Peru, a housing bank lends to parastatal utility companies (water/sewer and electricity) to build the distribution lines in upgrading areas. Costs of capital improvements are recovered from the beneficiaries through surcharges on their utility bills. Delinquency results in cutting off the customer's utility service. Tenure granting has often lagged behind this activity. Consequently the municipality has held off plot taxation and is not yet able to recover costs of improving its own services such as garbage collection and installation of park and recreation facilities in the upgrading neighborhoods.

In the Ivory Coast, cost recovery is achieved through a betterment tax imposed on property owners. It is expected that they will pass the expense on to their tenants through charging higher rents. Increased density in these areas will eventually help spread the costs of infrastructure improvements among more dwelling units.

In Korea, the sale of plots to the households that occupy them is the means through which the municipalities raise funds for defraying improvement costs. In effect, the city provides the financing for the difference between the land price and the infrastructure loan. Cities are encouraged to set lot prices as close as possible to market values, however, while keeping within the parameters of affordability by area residents. The hope is to suppress speculation and replenish a continuing funding source for subsequent upgrading efforts.

In Botswana, the Old Naledi and subsequent upgrading projects have involved granting of tenure by the town in the form of a "certificate of occupancy" rather than fee simple title to the land. Monthly payments of a "service levy" are charged to cover costs of the

infrastructure installations, user fees for water from the shared stand-pipes garbage collection, and street lights where they have been installed. No home improvement loan mechanism is yet in effect because lending institutions do not recognize the certificate as a basis for a mortgage. Nevertheless, many families have found savings or other sources of funds for dwelling improvements.

In the AID-assisted Honduras projects, Tegucigalpa has been using valorization assessments to recuperate up to the total costs of water, sewerage, and electricity improvements. San Pedro Sula, which operates a municipal water authority, amortizes water and sewer costs through a surcharge on the monthly bills to users. Here promissory notes are signed by individual beneficiaries and by the local community organization for the group collectively. Honduras' view is that every family should pay something for its benefits, even if they can not afford the whole share. Assessments may be made at full share, but payment terms are tailored to the families' ability to pay. In individual cases of extreme hardship, payments may be waived temporarily. For families at the lowest end of the income scale, tax liabilities may be partially subsidized out of a City revolving fund. It is a matter of principle, however, that everyone must pay something.

E. Implementation

Together with cost recovery, coordination of various governmental and parastatal agencies responsible for elements of an upgrading project seems to be the most difficult task. Governmental structure is just not established to handle easily remedial construction and socio-economic welfare work that involves close coordination of diverse institutions. Unfortunately, there is no general rule for easy implementation, except one of advance planning to diagnose institutional problems before they occur. Each society has to devise an approach appropriate to its own institutional structure.

In Tunisia, the Mellassine case below illustrates the scheduling difficulties that can occur when the principal implementing agency (the Municipality) lacks control over priorities in central government agencies which have major, complementary contributions to make.

Other problems are encountered, however, when implementation is assigned to a central government agency farther away from the usual locus of responsibility for municipal development matters. In Peru, officials of national government get bogged down under mounds of operational details. Regional offices of these agencies have problems achieving coordination with independent parastatals and other branches of their own ministries. When work is close to completion and the municipality is to take over, the upgrading neighborhoods then become loath to give up their special favored-client status with the central government authorities. In Thailand, the central National Housing Authority has consolidated responsibility for making the physical improvements in neighborhoods, but has considerable difficulty in getting the municipalities to take over maintenance of the improvements once completed.

For Panama, a special High Level Commission was created to preside over developing the large San Miguelito project area. Although given broad powers to deal with land tenure, infrastructure, housing, and other construction, this ad hoc body has come to assume little more than a vestigial role. Real responsibility lies with the elected officials of the District's five subdivisions. They have lacked sufficient staff capacity, resources, and supervision for these tasks.

There is always a danger in creating special institutional entities to carry on new functions such as upgrading. Coordination in government is hard enough to achieve without additional layers.

With upgrading, the objective should be to institutionalize the process. Catching up with unmet needs for basic services should become a normal activity in the business of those existing agencies who already have responsibility for managing urban development. Where municipalities carry this responsibility for most urban services, depend on the values created by development as an important source of revenue to finance their services, and have potential to develop capacity to manage upgrading projects, the municipality should probably have primary responsibility. When social programs and economic assistance are included along with physical improvements, the necessity of a resident pro-

ject staff that can engender confidence on a daily basis is essential. It is in any case probably best to initiate upgrading that can be carried out by small numbers of available staff and permit projects to grow as the experience and skill of the personnel increases.

V. Mellassine Case Study

Tunisia's Mellassine project provides an excellent example of approaches, successes, and shortfalls in an upgrading program. It has been financed with a USAID Housing Guaranty Loan and funds from the Tunisian Government (GOT). Implementation is primarily the responsibility of the Municipality of Tunis. Preparatory work on the project began during the mid-1970s, but actual construction of improvements began in 1980.

Tunisia's interest in upgrading came only after the "classic" attempt to eradicate slum and squatter housing in Tunis had been tried with little success. Social cohesion in the remaining marginal areas was fairly strong, and there were growing instances of unrest over economic conditions...including riots. Something had to be done to demonstrate that government was concerned with the stability and support of these neighborhoods. After preliminary studies with AID and the World Bank, certain areas were selected for upgrading and social/economic assistance. Mellassine became a clear choice of a densely populated neighborhood with serious physical and economic problems where quick remedial action was necessary.

The neighborhood had, in 1979, 45,000 people in 4,000 dwelling units situated on about 130 hectares, of which only 56 were actually developed. Overcrowding was intense. According to the socio-economic survey conducted before initiating the program, there were an average of 10.1 people per household, 1.9 households per dwelling unit, and 3.6 people per room.

From a "development" standpoint, Mellassine was extremely well located in regard to employment and potential services: it adjoined the central area, had good public transportation, was close to a major hospital. Water and sewer systems were already installed. Only 41 percent of the households had water connections, however, and 64 percent were connected with the sewer.

Most of the buildings in Mellassine were constructed of masonry and other durable materials. The road system was fairly regular, although streets were unpaved and drainage was terrible. The neighborhood was, in fact, situated on marginal land at the edge of a salt lake and was subject to severe seasonal flooding.

Unemployment was high in Mellassine. Despite the fact that the neighborhood was the center for a "District" in Tunis and had a district headquarters building and police station, community facilities and services were practically non-existent. About 50 percent of the population was under the age of 20. The 63 school classrooms in the neighborhood resulted in a ratio of 1.75/1,000 compared with 2.6/1,000 in the city as a whole. Schools were operating with three shifts per day.

Tenure in Mellassine was quite mixed. There were many squatters who had constructed and occupied dwellings illegally, but many legitimate renters and homeowners as well. The Municipality already owned portions of the land, but there were absentee and resident private owners and many parcels on which land title was cloudy.

A. Initial Planning

Considerable preparatory work was done before the actual upgrading program was designed. One of the most important steps was for the GOT to commission a detailed survey of physical and economic conditions in the neighborhood. Skilled interviewers were employed, and the baseline data derived were utilized in program design. They are also helping both the Tunisian authorities and AID to monitor progress.

Simultaneously with the survey, work began on preparing a detailed physical master plan. This plan, completed in 1979, portrayed all of the physical improvements to which the Tunisian authorities would become committed: road and utilities systems, new schools, markets, sport fields and other community facilities, and areas for expanded housing and sites and services. The document was an "end state" plan, that is to say it presented a new portrait of Mellassine for a time at which all of the physical improvements would be completed. It did not

include a schedule or a sequencing of the improvements themselves, an omission that would become a problem as implementation proceeded.

In addition to the physical improvements, decisions were made to conduct a program of economic and social assistance in the neighborhood. Also supported by USAID funding, this program was to involve a team of Tunisian professionals, with US advisors, who would be stationed within the neighborhood to perform their work.

Cost recovery was to be an important objective of the Mellassine program. Means were to be devised for long-term repayment of utilities installation by the beneficiaries. Tenure was to be granted to the residents, and home improvement loans would follow. On all of these "institutional" matters, Mellassine was to be the pilot project through which approaches could be derived to apply to other neighborhoods in Tunisia.

Primary implementation responsibility became that of the Municipality and its public works department. Public Works was to be directly responsible for certain improvements. It would coordinate others that various national ministries and parastatal organizations would actually build, and the Municipality would be responsible for the socio-economic team. Detailed design and implementation began in 1980. The results after two years were as follows:

B. Physical Improvements

One of the principal objectives in Mellassine was to move rapidly with basic physical improvements to demonstrate the government's sincerity in upgrading the neighborhood. Rapid results were achieved for those projects directly implemented by the Municipality and by certain powerful parastatal organizations who agreed to give the project priority.

A specific physical objective was to upgrade (through stabilization, paving, curbing, etc.) 27,000 linear meters of roads. The municipality handled the work and by early 1982, 50 percent of the target had been reached. Already the neighborhood looked cleaner and neater than other nearby marginal settlements. Garbage collection could

be done regularly and thoroughly, and the streets of Mellassine began to be indistinguishable from regularized settlement elsewhere. Mellassine had no local market prior to the project. A new municipally-constructed market was almost ready for occupancy by early 1982.

Parastatal organizations moved rapidly as well. The water target was to install 10,000 meters of line and direct hook-ups to the vast majority of dwellings which had lacked service. By early 1982 (e.g. in less than two years) this work was 95 percent complete. The sewer target was to improve the system and install 7,000 meters of line. This was totally completed. Mellassine had lacked street lighting, a factor in serious crime problem. The installations were all in and operating by early 1982. These agencies had indeed moved swiftly, utilizing skilled crews, and had performed the work at or below original budget estimates. Tangible improvements were taking place in Mellassine.

Work did not move so smoothly, however, on more complicated physical changes or on projects for which other government agencies were responsible.

A new shelter program was also designed for Mellassine on some of the still-undeveloped land. The Municipality was to provide relocation housing for some of the families displaced by utilities improvements and generally to reduce overcrowding. All told 87 core units and 300 lots for sites and services were designated. The project had serious design and cost problems and was re-designed before the AID-assisted financing could be approved. In the meantime almost all of the displacement for utility construction had occurred and as no units were ready, these households had to resettle elsewhere. An equally serious problem was that some of the housing land became subject to drainage and flooding problems which, in this area, were more severe than when the upgrading activity started. This, too, held up construction.

Serious miscalculations were made regarding the drainage issue, originally flagged as a major site problem in Mellassine. Due to certain nearby highway construction conducted by a government agency totally independent of the Mellassine plan, much of the project area including sites for community facilities as well as housing was flooded during rainy periods. While steps have been taken to rectify the prob-

lem, it will take considerable time and expense to correct. Thus while major improvements have indeed occurred in Mellasine, in one respect basic physical conditions have deteriorated.

Over and above the flooding problem, however, it was also clear in early 1982 that critical community facilities commitments had not yet been made by agencies outside the Municipality who were responsible. School overcrowding had, for example, been targeted as a serious problem. Four new schools were included in the master plan, but only two classrooms were actually under construction and no new facilities had been programmed. A similar situation pertained to a dispensary, gymnasium and sports fields, a cultural center, PTT and Police stations. Scheduling and construction of all these facilities were under central government ministries. Other than persuasion, the Municipality could not exercise any influence on the schedule or budgetary commitments of these ministries. Since a timetable had not been established at the outset of the project, to which all participating institutions were committed, there could be no guarantee on when or whether the facilities would actually be built.

C. Social-Economic Matters

Undertaking direct social and economic assistance to a marginal neighborhood was a new activity for the Government of Tunisia. Mellasine was the first project. As a first project, it suffered from organizational difficulties, financial constraints, and delays. Unlike the physical improvement side for which quite precise targets of achievement could be set, both the Municipality and the professional staff struggled with defining objectives and expected accomplishments. As a result, much of the socio-economic work lagged behind the physical improvements.

Nevertheless the several-member professional team became adept at winning confidence from residents of Mellasine. They were headquartered in the neighborhood, and their daily presence represented tan-

gible sign of government sincerity to provide service to the community. In the period of less than two years, therefore, there were some striking accomplishments.

The team set up a vocational training program to teach teen-age girls skills, primarily sewing. A nearby training center was augmented with staff and equipment, and some 300 young women became beneficiaries. Surveys of maternal health and nutritional conditions were undertaken and programs of information and re-education initiated to reduce infant mortality. An extensive program of family case work was begun, involving almost 1,500 visits in 1981, within which the project staff dealt with financial, housing, employment and other problems. A literacy program was initiated, in which over 100 residents were enrolled.

Although long delayed, by March 1982 an AID-assisted credit program for small businesses in the area was launched. Indeed, a surprising number of small firms were discovered through a direct survey in Mellassine, far more than had been anticipated in the census. Once the recipients of the business loans were identified, the project, again with AID support, would work with each beneficiary to help in conveying basic bookkeeping and management skills while the loan was being repaid.

Perhaps the most striking achievement of the socio-economic group had little direct impact on Mellassine itself. After two years a well-functioning team of diverse professionals had been created, with relatively high morale despite a series of frustrations. They began to operate as a team which could extend its services within Mellassine or expand to other neighborhoods as resources and government commitments to upgrading increased. But even the team members themselves acknowledged that tangible results of their work in Mellassine would be extremely difficult to identify. The problems were too great. The time had been too short, and the basic poverty levels persisted.

One example of resistant conditions was unemployment. While the project team had initiated skills training for girls, little progress was made on jobs or training for the large number of unemployed men. Some work was found on the municipal construction jobs, which terminated when the projects were complete. The parastatal agencies, furthermore,

declined to employ labor from the project area. They had their own trained crews and did not want to "dilute" progress by taking on unskilled residents.

D. Other Issues

In two aspects of the original objectives, extremely little progress had been made by early 1982. Cost recovery was one of these. The Municipality had designed a system for levying charges on residents to defray the costs of water, sewer, lighting, and other installed facilities. A computerized record-keeping system was also established. No implementation had taken place, however, as the precise organizational responsibility for collection was still to be defined. In the meantime, many of the facilities were installed and the residents were benefiting from the service. While they know charges will one day be levied, the longer it takes, the more resistance to payment will probably occur.

Devolution of land title is the other. Again, providing secure tenure was a major goal of the project. Here, too, implementation proved a more complicated affair. The city had taken the first step of expanding municipal ownership into some of the properties which would later be conveyed to residents. Decisions had been taken to establish some form of long-term leasehold that would provide security and mortgageability for housing improvement. Nevertheless, as in many other countries, clearing up title issues was proving to be a long, slow process and it looked as if some time would be required (as yet undefined) before actual title transfer could occur. As a result, loans for improvement to individual shelter have not yet been made and relatively few properties have actually been upgraded.

Yet another issue underlies much of the Mellassine activity: community participation. Given the political and traditional structure of Tunisian society, there has been relatively little experience of neighborhood participation in major public decisions. Except for the initial diagnostic surveys, the residents of Mellassine have had little direct input into the design and placement of the public works improvements. Even in the socio-economic support, decisions have been made by

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the authorities and information conveyed to the residents. There is a deep concern within the Municipality as well as the project team that community participation has been insufficient, but no clear ideas on how to increase that involvement without opening up potentially dangerous issues of control.

VI. Measures of Success

There are no rigid black-and-white standards of success in the business of upgrading. Each country has to go through the process of learning how to cope with its shelter problems in terms of its own ever-changing circumstances. The squatter settlements and other marginal neighborhoods have been created over generations. Their problems will not be solved in a day or two years.

Failure in these terms is failure to acknowledge the full range of shelter needs, failure to try to grapple with the problems of shelter and settlement, especially of the lowest income groups. Failure is clinging to inappropriate or harmful policies such as excessively high standards, heavy subsidies, or demolition of whole neighborhoods when other workable solutions such as upgrading are available.

Successes are degrees of achievement toward meeting needs, solving problems, improving living conditions, extending urban services, removing unhealthy and unsafe conditions, increasing skills and administrative efficiency and fairness in distributing benefits.

We need to measure upgrading projects against this conceptual model. Upgrading works if it brings the costs of improved shelter within a range the target groups can afford and if expenditures are, indeed, recovered from the beneficiaries. If upgrading is accomplished without major subsidies it should be replicable, and we can look to see if it is replicated where appropriate. By incorporating upgrading programs into the normal course of managing urban development, countries should eventually be able to make substantial gains against the backlog of unmet need for basic urban infrastructure and livable neighborhoods.

APPENDIX A: EXAMPLE OF AFFORDABILITY PRESENTATION

Table V-8

ESTIMATED HOUSING NEED AND AFFORDABILITY^A - 1978

(Based on planning assumptions, not empirical data. Footnotes appear on following page.)

	<u>Swaziland Urban Families</u>		<u>Core Region Urban Families</u>		<u>Swaziland Urban Families in Informal Sector Housing</u>		<u>Core Region Urban Families in Informal Sector Housing</u>	
	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Estimated Number</u>	<u>%</u>	<u>Estimated Number</u>	<u>%</u>
Total Families	30,830	100%	19,430	100%	14,500	100%	9,200	100%
<u>Income Distribution (1)</u>								
High Income (E 350+)	4,000	13%	2,530	13%	--	--	--	--
Medium Income (E 160-350)	10,480	34%	6,600	34%	1,500	10%	900	10%
Low Income (under E 160)	16,350	53%	10,300	53%	13,000	90%	8,300	90%
<u>Shelter Affordability by Low Income Families (2)</u>								
Total Low Income Families	16,350	100%	10,300	100%	13,000	100%	8,300	100%
Can Afford One Bedroom House ^D (E 4140) at 25% of Income (E 135-160 monthly income)	3,400	21%	2,140	21%	1,600	12%	1,010	12%
Can Afford Full Sites and Services ^C (E 3000) at 25% of Income (E 110-135 monthly income)	3,420	21%	2,160	21%	2,250	17%	1,430	17%
Can Afford Basic Sites and Services ^D (E 1500) at 20% of Income (E 75 - 100 monthly income)	4,390	27%	2,760	27%	4,000	31%	2,560	31%
Can Afford Squatter Upgrading ^E (E 400) at 10% of Income (E 45-75 monthly income)	3,100	19%	1,950	19%	3,100	24%	1,990	24%
Cannot Afford Economic Housing (less than E 45 monthly)	2,040	12%	1,290	12%	2,050	16%	1,310	16%

Source: Riykin Associates, Inc.: Swaziland Shelter Sector Assessment; USAID, 1978

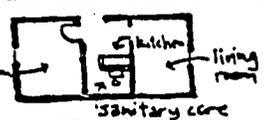
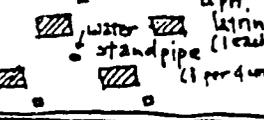
Footnotes to Table V-8

Housing Prototypes - Illustrative Standards and Costs

- a. Market Level Financing Terms at Swaziland Development and Savings Bank. 10% down, 11% interest, 25 year term for repayment (not past 25th birthday) 11.8% constant payment per year, maximum 30% of income for debt service.
- b. One Bedroom Expandable Unit. One bedroom plus sanitary core, kitchen and living room with 37 M² gross building area at 12.8 per acre. Aided self-help unit. Mortgage includes insurance costs.
Total Cost = E 4140
Down Payment 414 (10%)
Mortgage E 3726 x 11.8%/year = E 37/month debt service
25% of income requires E 148 per month of household income
30% of income requires E 123 per month of household income.
- c. Fully Served Sites and Services. Individual water tap for each dwelling unit, sewerage, sanitary core, 330 M² plots (6 per acre), no electricity.
Total Cost = E 3000 including land, infrastructure, and materials for house
Down Payment 300 (10%)
Financing E 2700 x 12.4%/year (20 year term) = E 28/month debt service
25% of income requires E 110 per month of household income.
- d. Basic Sites and Services. Water standpipe for each 4 dwelling units, individual pit latrine, lots @ 12/acre.
Total Cost = E 1,500 including land, infrastructure, and materials for home
Down Payment 150 (10%)
Financing E 1,350 x 13.6%/year (15 year term) = E 15/month debt service
20% of income requires E 75 per month of household income.
25% of income would require E 60 per month of household income.
- e. Squatter Upgrading. Pit latrines, footpaths, etc. as called for in individual projects.
Total Cost = E 400 including infrastructure only
Financing E 400 x 13.6%/year (15 year term) = E 4.50/month debt service
10% of income requires E 45 per month of household income
25% of income would require E 18 per month of household income.

case study Swaziland

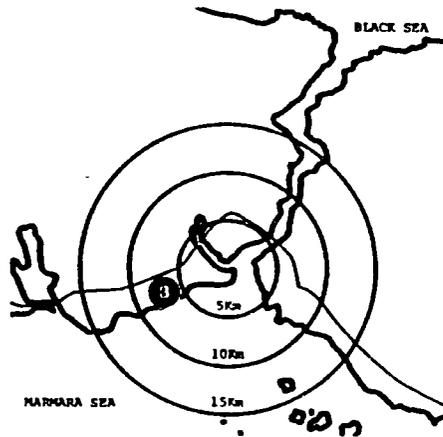
LOW INCOME FAMILIES IN SQUATTER AREAS OF THE PRINCIPAL CITIES (CORE REGION)

monthly income	no. of families	%	affordable solution
E135 - 160	1,010	12%	<p>one bedroom house (E4140) at 25% of income 37 m² gross building area 12.8 units per acre</p> 
E110 - 135	1,430	17%	<p>full sites & services (E3000) at 25% of income 330 m² plots - 6 units per acre no electricity</p> 
E75 - 110	2,560	31%	<p>basic sites & services (E1500) at 25% of income 12 plots per acre</p> 
E45 - 75	1,990	24%	<p>squatter upgrading (E400) 10% of income</p> <p>pit latrines foot paths other projects as called for</p>
LESS THAN E45	1,310	16%	
TOTAL LOW INCOME FAMILIES IN SQUATTER AREAS OF PRINCIPAL CITIES (CORE REGION)	8,300	100%	

APPENDIX B: EXAMPLE OF PHYSICAL SURVEYS FOR UPGRADING

3 ZEYTİNBURNU, İstanbul

POPULAR, LOW/MODERATELY LOW INCOME, SQUATTER HOUSES/WALK-UP APARTMENTS



LOCATION: Located on the Sea of Marmara, outside the old city walls, the settlement is approximately 7 km. from the city center. The district of Zeytinburnu covers an area of 40 km². The locality boundaries are defined by: the London Highway on the north, to the south the transcontinental railroad-rapid transit line and adjacent industry, institutional and industrial development on the east, and Veli Efendi Hippodrome to the west.

ORIGINS: In 1880 the Zeytinburnu region, part of two large vakif (religious) foundations, was donated by the Sultan as a favor to the Armenian community. Political influence prevented the area from being developed. Between 1911 and 1914 Priest Agop, under whose name Zeytinburnu was registered,

ZEYTİNBURNU, İstanbul: (top) View from a minaret. The tight grouping of squatter dwellings occur due to expansion for rental purposes or as families receive new members. Gardens are highly developed by the residents. Walk-up apartment buildings are beginning to replace original squatter constructions.

(bottom) The main street is typical of the growth and assimilation of a squatter settlement into the urban environment; highly commercial, automobile oriented, substantial and fairly sophisticated building construction.



Source: Butler M and N: Urban Dwelling Environments, Istanbul, Turkey; Massachusetts Institute of Technology, 1976



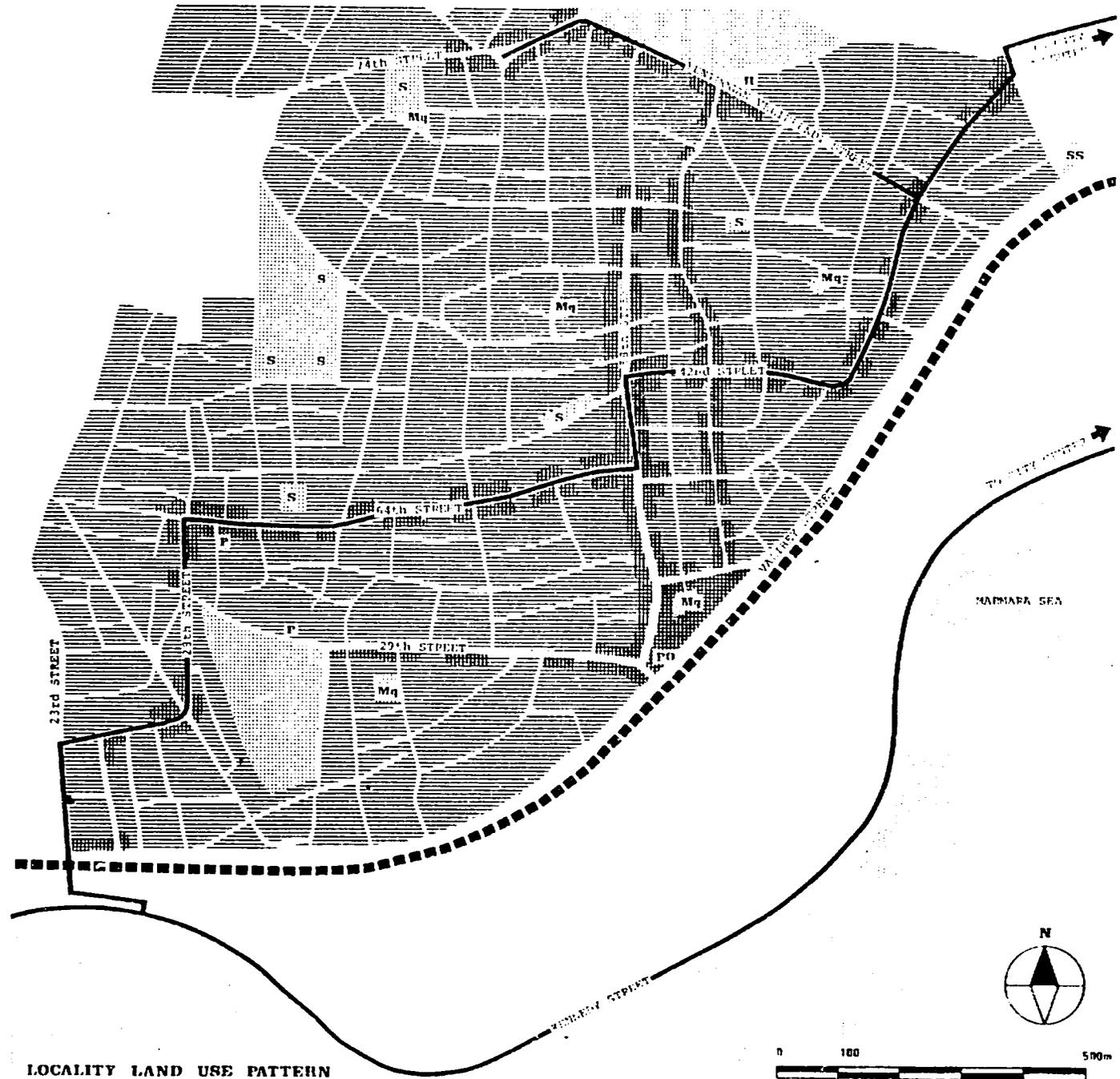
sold parts of the land to private individuals. After his death the remaining land returned back to the Vakıflar Administration. The first squatter constructions occurred in 1945 and continued until 1948. After being saved from destruction by the authorities in 1948 more rapid development took place. By 1962 the older neighborhoods were almost saturated. From 1954 to 1959 the Vakıflar Administration sold parts of the land to squatters in accordance with legislation No. 6188. Because of political problems not all squatter owners on Vakıf land received their land titles. Realizing the expense of retaining their land, private land owners began selling land to squatters. Instead of parcelling their land, some large land owners sold "shares" in their land. Thus 40 to 50 squatters "share" one parcel of land. In some cases a piece of land has three different parties claiming ownership: the private owner, the Vakıflar Administration, and the Municipality. In 1957 Zeytinburnu became a district. Thus for the first time a squatter area became an administrative unit within the boundaries of the Municipality of Istanbul.

LAYOUT: The layout is typical of squatter settlements that develop on flat land. Social factors rather than physical forces determine layout. The squatters create their own cluster groupings and blocks. The blocks are large enough to allow lots of varied sizes and configurations to occur independent of the circulation network. A combination of row, semi-detached and detached one story masonry and concrete dwellings predominate. With the implementation of the Squatter Law of 1966, Zeytinburnu was designated as a rehabilitative squatter area. A plan of lot subdivision was made saving most of the existing conditions. Since then many residents have received land titles. Concurrently, planning for the improvement of streets and infrastructure networks was initiated. Land values have begun to increase to the point where substantial investment is being made in the development of three to five story walk-up apartment buildings typical of those found throughout middle income areas of Istanbul.

LAND USE: Formerly an agricultural area Zeytinburnu has become primarily residential. Mosques, schools, and limited community facilities are scattered throughout the locality. A large complex of schools and a farm are located on the western edge of the site. Commercial and limited light industrial activity is concentrated along major circulation routes. The major commercial activity originates at the railroad-rapid transit station and extends north through the community. Increasing land values have encouraged redevelopment of land from single to multi-story construction as well as changing land use from residential to commercial. A strip of heavy industry is located between the locality and the Sea of Marmara.

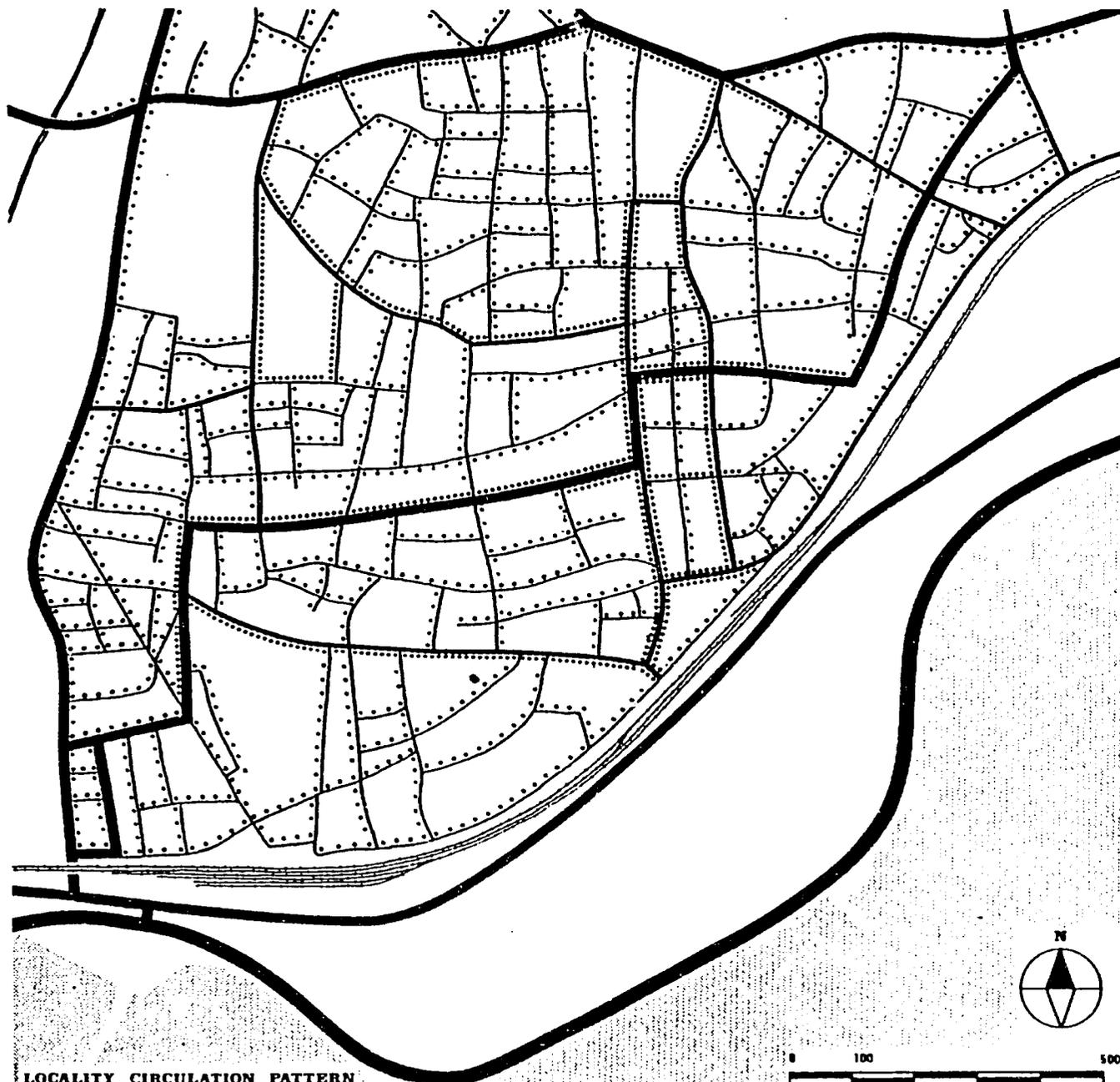
- AREAS**
-  RESIDENTIAL
 -  COMMERCIAL
 -  INDUSTRIAL
 -  OPEN SPACES

- KEY**
-  Parking
 -  Police
 -  Fire Department
 -  School
 -  Mosque
 -  Recreation
 -  Library
 -  University
 -  Hospital
 -  Post Office
 -  Social Services
 -  Market
 -  Cemetery
 -  Bus
 -  Rapid Transit



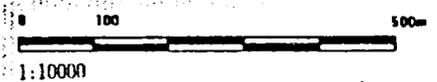
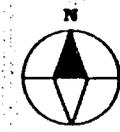
LOCALITY LAND USE PATTERN





CIRCULATION: Heavy vehicular circulation cuts through the locality from the southwest to the northeast on a paved road which follows the original irregular circulation grid. Because of the many turns, narrow streets, commercial activity, and high traffic volume of buses and private mini-buses, this major circulation path is congested. Heavy pedestrian and vehicular traffic exists along 58th Street, a boulevard route through commercial development to the rapid transit-railroad station. Most residential streets are paved or are in the process of being paved. Where building and garden walls used to define the street, new construction is incorporating curbs and sidewalks. Although most movement within the locality is pedestrian, streets are usually wide enough to accommodate limited vehicular traffic and parking.

KEY
 ————— VEHICULAR
 PEDESTRIAN



LOCALITY CIRCULATION PATTERN

POPULATION. According to the 1970 Census the locality had a population of 117,200 persons. In 1960, 55% of the population of 80,078 were between 13 and 65 years of age. 52% were foreign born immigrants most coming from Yugoslavia, Bulgaria, Greece and Romania. 25% migrated from the Black Sea Region of Turkey. 65% of the males migrated to the area directly from their villages. 56% of the families were homeowners. 77% of these families did not have land titles. On the average there were 4.71 persons per household and 2.92 persons per room. 56.7% of the population was illiterate.



INCOME: Available statistical data dates back to 1962-65. The \$793 annual median family income of 1964 has doubled or tripled by 1975. More than half of the working population are laborers. The rest are tradesmen, artisans, or government employees. The majority work within walking distance of the industrial areas of Bakirkoy, Zeytinburnu and Kazlıcesme. About one fourth of the labor force work in the historic peninsula. At least one half of the people live in rental units. One room squatter dwellings rent for a minimum of \$15 per month.



ZEYTINBURNU, Istanbul: (top left and right) Views of cluster courts which in many instances are created as dwellings expand for multi-family use. Access into clusters is usually undeveloped. Notice the television antennas.

(bottom left) Walkways are defined by property walls and dwellings. Walk-up apartment in background is recent. A small store is incorporated in the first floor.

(bottom right) Undeveloped residential street. Construction at left without a tile roof is unusual. Even though this building is only for storage/animals, almost all buildings have tile roofs.



LOCALITY CONSTRUCTION TYPES

	%	SELF-HELP	ARTISAN	INDUSTRIAL	CONTRACTOR
BRICK	_____	_____	_____	_____	_____
MUD/WATTLE	_____	_____	_____	_____	_____
WOOD	_____	_____	_____	_____	_____
MASONRY WOOD	██████████	██████	██████	██████	██████
MASONRY CONCRETE	██████	██████	██████	██████	██████
CONCRETE	_____	_____	_____	_____	_____

The chart shows (1) approximate percentage of each construction type within the total number of dwellings and (2) building group that generally produces each type.

Quality of information: Approximate

LOCALITY UTILITIES AND SERVICES

WATER SUPPLY	██████████
SANITARY SEWERAGE	██████████
STORM DRAINAGE	██████████
ELECTRICITY	██████████
GAS	_____
REFUSE COLLECTION	██████████
PUBLIC TRANSPORTATION	██████████
PAVED ROADS, WALKWAYS	██████████
TELEPHONE	██████████
STREET LIGHTING	██████████

LOCALITY COMMUNITY FACILITIES

POLICE	██████████
FIRE PROTECTION	██████████
HEALTH	██████████
SCHOOLS, PLAYGROUNDS	██████████
RECREATION, OPEN SPACES	██████████

The chart illustrates the approximate availability of utilities, services, and community facilities at three levels: NONE, LIMITED, ADEQUATE.

Quality of information: Approximate

██████████ SELECTED BLOCK



LOCALITY SEGMENT PLAN

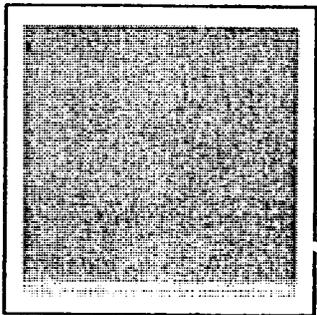
1:2500

LAND UTILIZATION DIAGRAMS



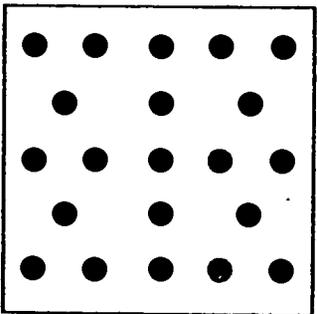
PATTERNS

Public:	streets/walkways	
Semi-Public:	playgrounds	
Semi-Private:	cluster courts	
Private:	lots	
	dwellings	



PERCENTAGES

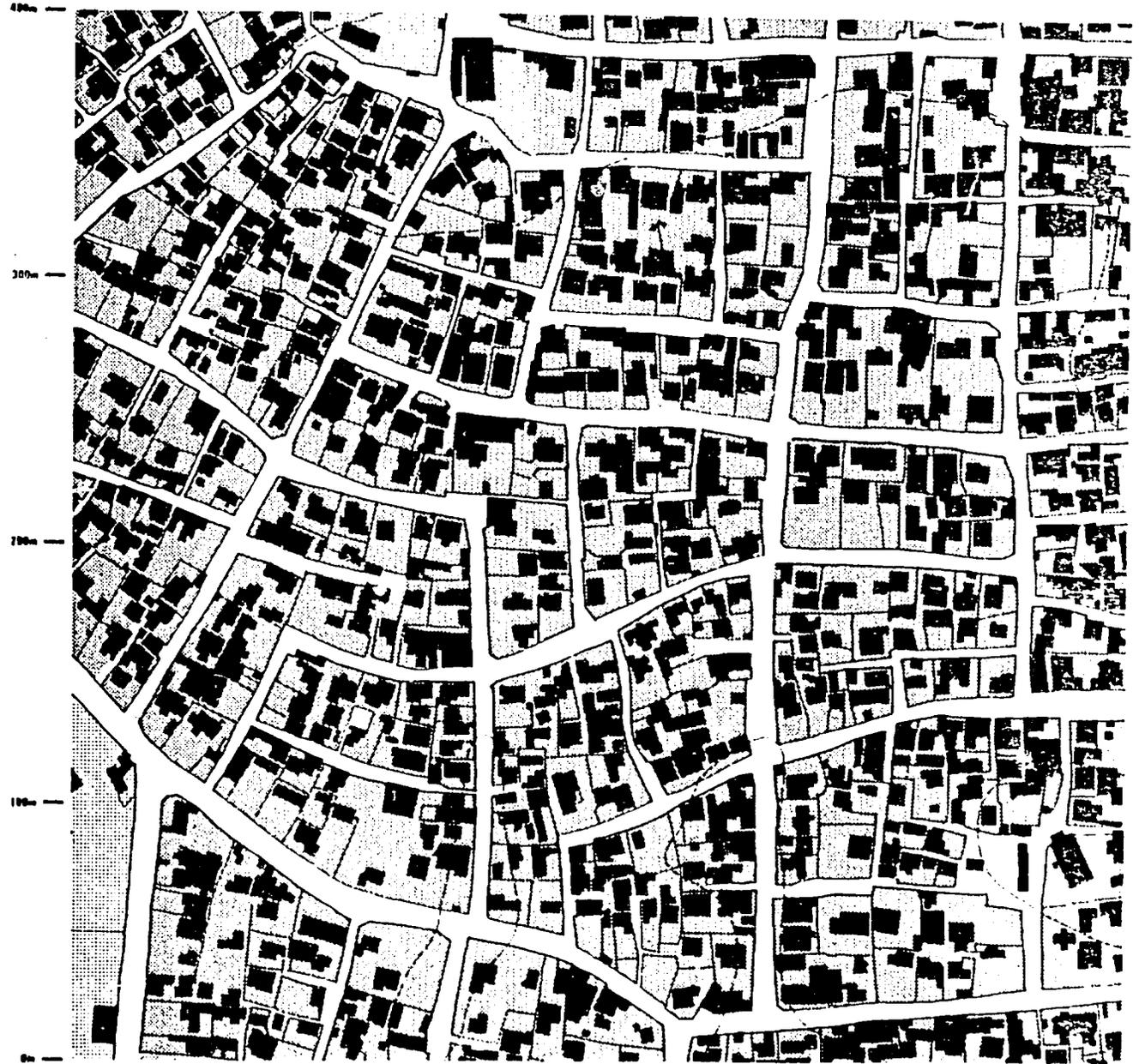
Streets/Walkways	22%
Playgrounds	3%
Cluster Courts	2%
Dwellings/Lots	73%



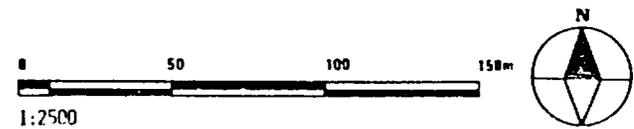
DENSITY

Persons/Rectangle	420
-------------------	-----

● 20 persons



LOCALITY SEGMENT LAND UTILIZATION

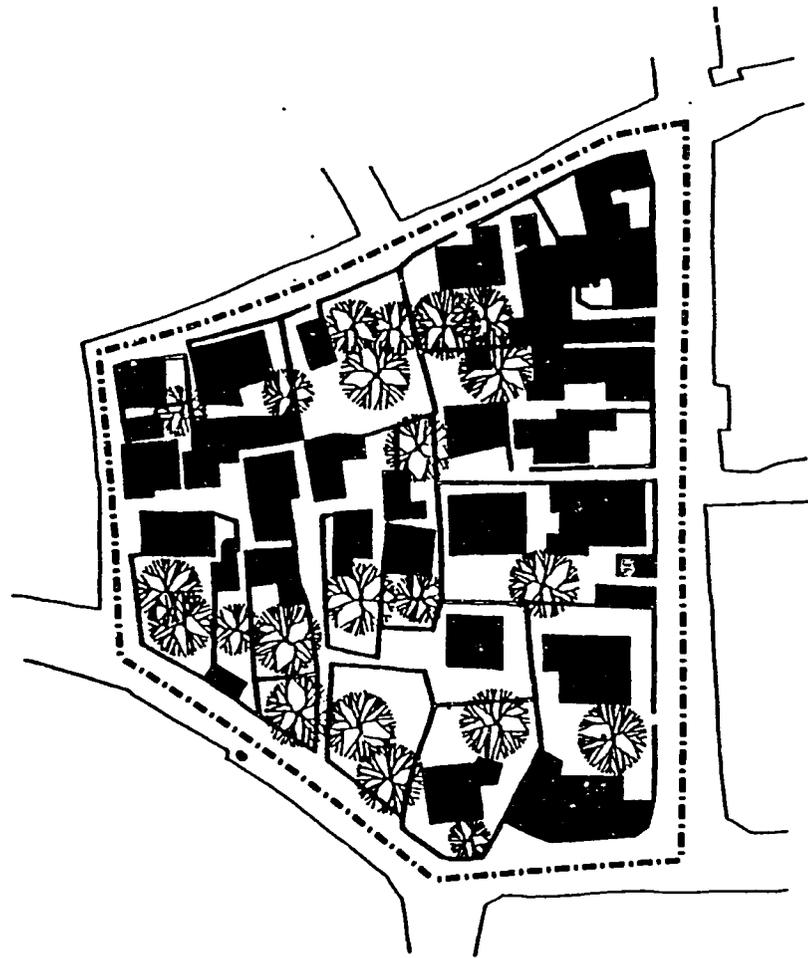


LOCALITY SEGMENT LAND UTILIZATION DATA

DENSITIES	Total Number	Area Hectares	Density M/ha
LOTS	700	16.0	44
DWELLING UNITS	1400	16.0	88
PEOPLE	6720	16.0	420

AREAS	Hectares	Percentages
PUBLIC (streets, walkways, open spaces)	3.5	22
SEMI-PUBLIC (open spaces, schools, community centers)	.5	3
PRIVATE (dwellings, shops, factories, lots)	11.7	73
SEMI-PRIVATE (cluster courts)	.3	2
TOTAL	16.0	100

NETWORK EFFICIENCY
 $R = \frac{\text{network length(circulation)}}{\text{area served(circulation, lots)}} = 315 \text{ m/ha}$
 AVERAGE LOT AREA = 167 m^2



LOCALITY BLOCK LAND UTILIZATION DATA

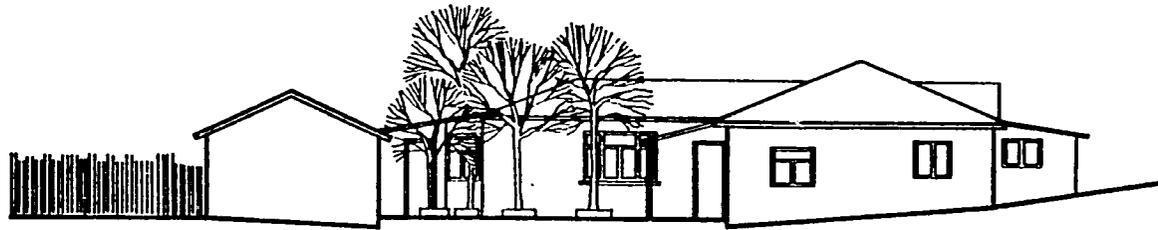
DENSITIES	Total Number	Area Hectares	Density M/ha
LOTS	32	.57	56
DWELLING UNITS	64	.57	112
PEOPLE	263	.57	462

AREAS	Hectares	Percentages
PUBLIC (streets, walkways, open spaces)	.09	16
SEMI-PUBLIC (open spaces, schools, community centers)	-	-
PRIVATE (dwellings, shops, factories, lots)	.47	81
SEMI-PRIVATE (cluster courts)	.01	3
TOTAL	.57	100

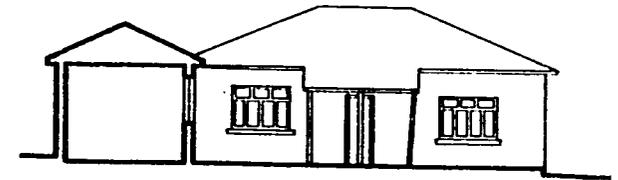
NETWORK EFFICIENCY
 $R = \frac{\text{network length(circulation)}}{\text{area served(circulation, lots)}} = 272 \text{ m/ha}$
 AVERAGE LOT AREA = 147 m^2

LOCALITY BLOCK PLAN

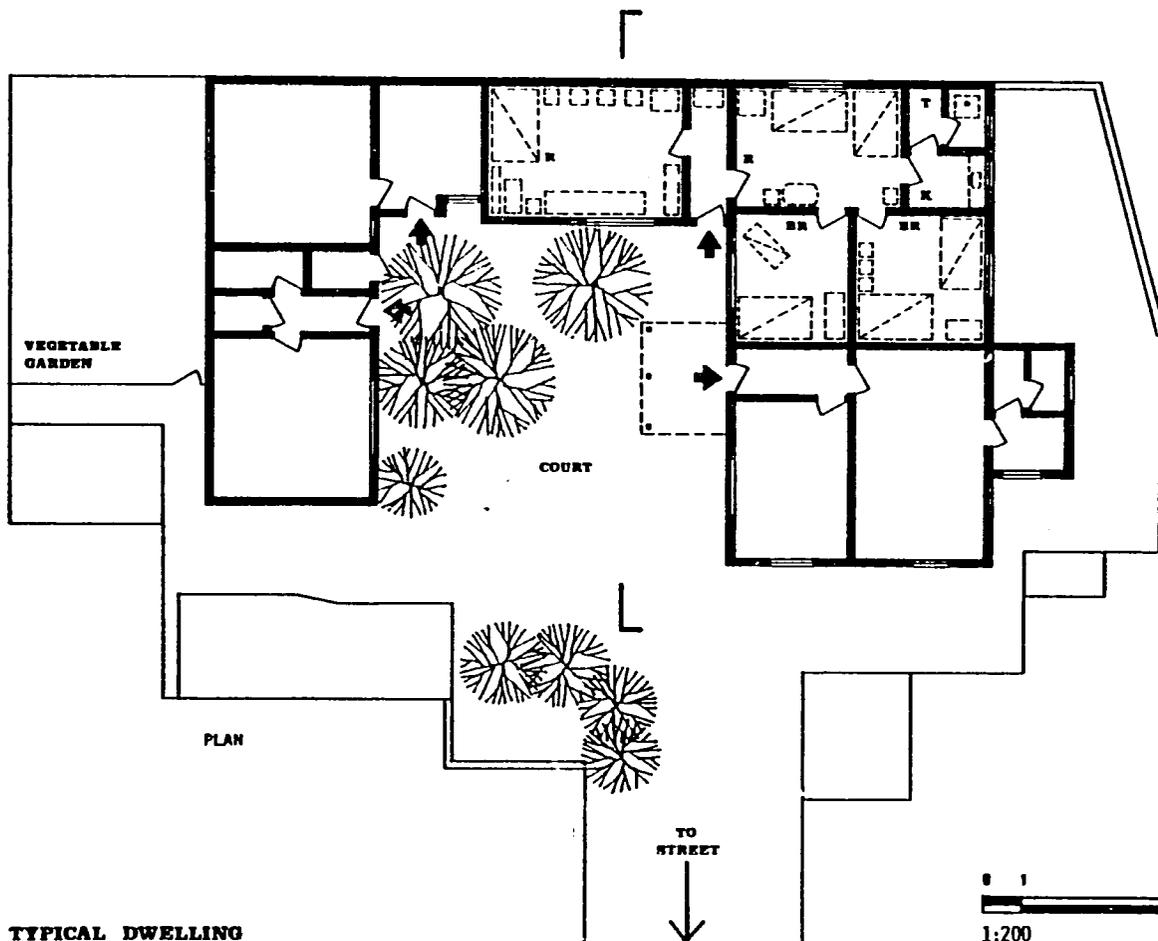




ELEVATION



SECTION



VEGETABLE GARDEN

COURT

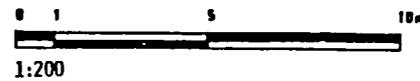
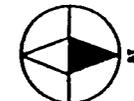
PLAN

TO STREET

TYPICAL DWELLING

KEY

- LW Living Room
- D Dining/Eating Area
- BR Bedroom
- K Kitchen/Cooking Area
- T Toilet/Bathroom
- L Laundry
- C Closet
- S Storage
- R Room (multi-use)





ZETTINBURNU, (left) View of row dwellings along a street. Construction is simple but substantial.

(right) Section of private open court. Residents create very pleasing living environments for themselves. Exterior as well as interior spaces are always well maintained.

LOCALITY SOURCES

- Plans: (approximate) updated official plans, Istanbul, 1960.
- City Planning Office, 1960.
- Land Use Patterns: (approximate) 1970 Field Survey, M. and N. Butler, 1975.
- Circulation Patterns: (approximate) Field Surveys, M. and N. Butler, 1975.
- Segment Plans: (accurate) Istanbul Municipal Squatter Planning Office, 1964.
- Segment Land Utilization: (accurate) 1970.
- Block Plans: (accurate) Field Surveys, M. and N. Butler, 1975.
- Typical Dwellings: (accurate) 1970.
- Physical Data: (accurate) 1970.
- Socio-Economic Data: (accurate) 1970.
- Photography: M. and N. Butler, 1975.
- Interviews, Istanbul: Istanbul City Department of Social Anthropology, 1975; Zengin, Burnu Gecekondu Bölgesi, M. M. Kart, Istanbul, 1969.



PHYSICAL DATA (related to dwelling and land)

DWELLING UNIT
 HOUSE
 type: 62
 area (sq m): 62
 LEGAL OWNERSHIP
 tenure: LEGAL OWNERSHIP
 LAND/LOT
 utilization:
 area (sq m): 400
 LEGAL OWNERSHIP
 tenure: LEGAL OWNERSHIP
 DWELLING
 location:
 type: ROW/GROUPED
 number of floors: 1
 utilization:
 physical state: FAIR
 DWELLING DEVELOPMENT
 mode: INCENTIVAL
 developer:
 builder: SELF-HELP/FARTISM
 construction type: MASONRY/WOOD
 year of construction: 1950
 MATERIALS
 foundation:
 floor: STONE/CONCRETE
 walls: CONCRETE BLOCK
 roof: WOOD/TILE
 DWELLING FACILITIES
 wc: 1
 shower: 1
 kitchen: 1
 rooms: 1
 CENTRAL SPACE
 other:

GENERAL: SOCIAL
 user's ethnic origin: TURKISH
 place of birth: SINOP
 education level: NONE
 NUMBER OF USERS
 married: 4
 singles: 1
 children: 4
 total: 9
 MIGRATION PATTERN
 number of moves: 1
 1957
 rural - urban:
 urban - urban:
 urban - rural:
 why came to urban area:
 FAMILY/WORK
 GENERAL: ECONOMIC
 user's income group: LOW
 employment:
 GOVERNMENT EMPLOYEE
 distance to work: 12 KM.
 mode of travel: TRAIN AND SHARED TAXI
 COSTS
 dwelling unit: N.A.
 land - market value: N.A.
 DWELLING UNIT PAYMENTS
 financing:
 SELF-FINANCE
 rent/mortgage: N.A.
 % income for rent/mortgage: N.A.

SOCIO-ECONOMIC DATA (related to user)

MATERIALS FOR PRESENTATION

by

Mr. Joseph O'Leary

November, 1982

4th Annual AID International Shelter Workshop
for Senior Professionals

ACCOUNT DESCRIPTION	09/30/82 BALANCE	10/13/82 BALANCE	MO DIFFERENCE
U.S. TREASURY BONDS	5,000.00	5,000.00	.00
U.S. TREASURY NOTES	.00	.00	.00
U.S. TREASURY BILLS	.00	.00	.00
FNMA NOTES	.00	.00	.00
FHLB NOTES	.00	.00	.00
FHLMC NOTES	.00	.00	.00
FLP NOTES	.00	.00	.00
FARM CREDIT CONSOLIDATED NOTES	1,000,000.00	1,000,000.00	.00
CERTIFICATES OF DEPOSIT - BANKS	9,003,347.90	9,003,347.90	.00
CERTIFICATES OF DEPOSIT - ARBITRAN	.00	.00	.00
CERTIFICATES OF DEPOSIT - S&L	.00	.00	.00
COMMERCIAL PAPER	.00	.00	.00
LIQUIDITY FUND	4,016,302.45	4,014,302.45	.00
BANKERS ACCEPTANCES	.00	.00	.00
FHLB TIME DEPOSITS	.00	.00	.00
FHLB OVERNIGHT DEPOSITS	23,925,721.13	15,459,437.39	8,467,019.24-
FEDERAL FUNDS OVERNIGHT	500,000.00	.00	500,000.00-
FEDERAL FUNDS OVERNIGHT	.00	.00	.00
FEDERAL FUNDS OVERNIGHT	.00	.00	.00
OVERNIGHT FUNDS	.00-	.00-	.00-
LIQUIDITY INVESTMENTS	39,350,371.58	30,253,293.34	8,997,019.24-
CASH-NEW MAIN 1-003-77-1	7,021,932.22	2,459,010.79	4,442,822.43-
CASH-NEW NYC LOAN 1-232-14-2	5,209,980.53-	128,244.44-	5,077,711.15
CASH-NEW PAYROLL 1-201-23-2	37,751.52-	1,223.04-	31,564.44-
CASH-NEW FHLB 1-221-80-2	2,000.00	2,000.00	.00
CASH-NEW DIVIDEND 1-040-79-5	729,275.77-	225,225.70-	511,731.07
CASH-NEW VAN NESS 1-040-49-7	406,344.21-	515,449.92-	110,065.71-
CASH-NEW COUNTYCL 1-040-67-6	124,174.22-	105,799.81-	18,344.47
CASH-NEW BILL EBY 1-040-67-7	81,099.14-	21,075.45-	50,023.32
CASH-NEW OPERATING 1-022-47-9	.00	.00	.00
CASH-NEW DIVIDEND 1-200-29-3	.00	.00	.00
CASH-NEW LAB-NE-FY 1-147-77-3	1,184,350.11-	553,634.73-	631,924.39
CASH-NEW TR-WAR-W 1-147-79-1	27,384.50-	275,152.98-	223,448.47-
CASH-NEW W-1557-25 1-147-90-3	594,201.71-	384,627.55-	209,574.16
CASH-FHLB ADVANCE 2-070-20-1	.00	.00	.00
CASH-FHLB ADVANCE 2-720-10-1	.00-	.00-	.00-
CASH-FHLB DEMAND 2-070-200	.00	.00	.00
CASH-FSB TRANSFER 43-80111470	.00-	.00-	.00-
CASH-ASB W STAK ST 43-84229624	11,249.22	10,231.22	1,017.30-
CASH-ASB DIVIDEND 43-86229632	.00	.00	.00
CASH-ASB MTRBY PR 43-84296442	.00	.00	.00
CASH-NEFT EXHALL 127-180001-0	40,417.51	21,435.54	19,111.97-
CASH-NEFT ISM ST 019-302030-2	.00	.00	.00
CASH-MARTISON RT 202-744-1	7,070.33	55,200.22	49,730.59
CASH-CITIZENS NYC 020-1-770	2,186.54	2,186.55	.00
CASH-SIB TR TR PW 00 45-0045-0	14,960.49	40,717.29	43,755.50
CASH-IST BK MARGENTHA 3-514-307	4,430.46	4,358.31	272.15-
CASH-RT RET -PARTIC 01-401-243-0	.00	.00	.00
CASH-RT RET -PARTIC 01-400-512-0	.00	.00	.00
CASH-RT NATL PAYROL 270-345-2	.00	.00	.00
CASH IN BANKS	447,587.93-	1,293,593.25	1,731,176.18
TOTAL LIQUID ASSETS	39,200,144.68	31,942,099.15	7,259,046.53-

ACCOUNT DESCRIPTION	MONTH/DATE		YEAR/DATE	
	DEBITS	CREDITS	DEBITS	CREDITS
MORTGAGE LOAN PAYMENTS	20,426.93	2,471,591.79	2,094,032.19	40,229,980.09
MORTGAGE 00777	397,910.33	19,275.41	9,254,500.53	408,531.14
LOAN SALES/ADPT PAYMENTS	9,775.90	.00	7,772,234.49	25,633,339.47
LOAN DISBURSEMS	.00	5,440.27	12,059.57	456,307.51
PARTICIPATION CERTIFICATE	12,000,000.00	7,356.25	173,175,370.30	55,751,345.14
CONSTRUCTION/ADN AMORTIZED	.00	412,393.75	.00	6,430,096.02
CONSTRUCTION 09777	397,434.32	.00	1,023,693.91	42,700.00
LIQUIDITY MATURITIES/PURCH	15,615,010.98	24,444,266.02	720,011,615.80	353,735,754.09
CASH FUNDS ON HAND	257,076.15	290,638.98	5,172,216.86	5,148,624.43
EQUITY STOCK	.00	.00	457,500.00	.00
INVEST. IN SERVICE CORPS.	117,772.47	21,441.69	5,445,725.61	3,096,913.15
CASH ASSETS	.00	.00	78,821.96	15,214.46
DEBIT ACCTS	75,777.98	1,358.56	1,732,331.01	3,377.37
ACCTS REC. MAIL DIV.	58,156.77	2,427.16	5,741,235.70	7,760.57
TRUST ASSETS	236,472.37	308,179.65	70,373,933.29	60,555,350.53
* TOTAL ASSETS *	29,140,077.71	28,174,759.70	449,476,291.21	561,532,094.23
SAVINGS INCREASE (DECREASE)	24,747,442.53	29,476,432.92	771,333,913.31	402,513,969.45
UNEMPLOYED MONEY	4,000,000.00	.00	1,730,000.00	23,350,000.00
FEDERAL INCOME TAX	.00	.00	.00	21,580.55
CONTRIBUTED STAFF	120,132.53	120,150.86	7,315,042.04	2,314,701.54
TRANSFERS/ADPT	349,192.09	.00	4,374,143.56	303,353.82
TRUST LIABILITIES	877,440.76	2,741,290.47	47,410,332.10	33,077,535.73
* TOTAL LIABILITIES *	29,694,414.11	72,377,972.51	454,373,437.01	459,555,141.25
INTEREST ON INVESTMENTS	.00	18,547.11	36.22	590,453.15
LOAN FEES	125.00	7,593.50	4,155.00	543,264.39
STATE INCOME	7,750.37	33,417.73	479,335.91	2,213,950.12
* TOTAL INCOME *	2,385.37	59,729.34	513,497.03	3,637,665.15
OPERATING EXPENSES	49,704.19	24,021.90	4,771,271.47	619,143.25
INTEREST ON BORROWED MONEY	.00	.00	7,719,649.03	.00
TRUST REPRESENTING EXPENSES	404.32	1,910.12	45,821.92	17,079.12
* TOTAL EXPENSES *	49,710.20	25,932.02	11,956,744.42	633,241.41
* FINAL TOTAL *	58,000,744.29	-6,837,092.57	25,779,959.67	24,259,145.05

10/13/92

***** DAILY STATISTICAL REPORT *****

PAGE 1

	12/31/91 BALANCE	09/30/92 BALANCE	10/11/92	Y/Y DIFFERENCE	M/O DIFFERENCE	DAILY DIFFERENCE
***** TOTAL ASSETS *****	326,645,667.30	345,532,369.75	350,045,018.81	23,400,351.51	4,513,649.06	1,848,924.11
SAVINGS PASSBOOK	24,241,144.45-	31,793,293.77-	31,494,525.93-	3,054,599.52	180,542.16-	40,916.73-
SAVINGS CERTIFICATES CLUB	0,359.27-	50,459.70-	52,577.21-	43,799.94-	2,207.51-	00-
SAVINGS STATEMENT	1,171,507.93-	1,233,234.33-	1,677,214.35-	527,767.03-	405,320.19-	34,492.43-
SAVINGS	.00	.00	.00	.00	.00	00-
SAVINGS CERTIFICATES	164,333.34-	129,279.24-	133,019.07-	34,996.77	120.55-	00-
SAVINGS -PASSBOOK RATE	25,226,576.11-	31,779,355.09-	33,756,554.79-	2,527,017.32	599,130.70-	75,409.13-
SAVINGS 12 TO 24 MONTHS	30,000.77-	13,259.54-	19,919.54-	11,241.08	.00-	00-
SAVINGS 24 TO 36 MONTHS	77,492.15-	47,259.34-	47,019.94-	37,632.21	.00-	00-
SAVINGS 36 TO 48 MONTHS	255,989.45-	155,291.33-	155,710.67-	39,279.18	9,531.16	00-
SAVINGS 60 DAY NOTICE	393,334.39-	151,336.33-	201,976.41-	191,459.57	10,490.38-	00-
SAVINGS 12 TO 24 MONTHS	1,405,592.44-	935,222.52-	779,522.30-	427,000.56	8,400.32	00-
SAVINGS 30 TO 48 MONTHS	599,913.79-	329,490.32-	329,490.32-	294,131.47	.00-	00-
SAVINGS	.00	.00	.00	.00	.00	00-
SAVINGS 60 MONTHS	11,443,344.34-	6,479,374.65-	6,237,514.32-	7,665,941.74	240,390.36	00-
SAVINGS 72 MONTHS	7,240,431.79-	4,735,212.49-	4,639,534.59-	2,951,977.11	46,177.97	00-
SAVINGS 84 TO 120 MNS.	2,340,219.22-	1,442,300.37-	1,437,612.11-	322,537.39	4,563.26	00-
CERTIFICATES -FIXED RATE	24,230,121.19-	12,615,046.09-	12,116,310.33-	12,116,270.30	299,237.69	00-
SAVINGS 12/MONTH FLUTTER	.00	25,325.53-	37,233.21-	37,251.21-	1,332.58-	00-
SAVINGS 12/MONTH FIXES	.00	3,535,326.00-	3,673,673.47-	3,473,473.67-	119,659.77-	00-
SAVINGS 18/MONTH 10,000	.00	1,100,192.32-	1,106,947.24-	1,106,947.24-	1,225.59	00-
TOTAL 12/MONTH CERTIFICATES	.00	4,555,525.35-	4,315,493.12-	5,915,897.12-	119,373.77-	00-
SAVINGS -7 DAY NOTICE	.00	592,320.17-	1,146,423.71-	1,146,423.71-	554,463.52-	00-
SAVINGS -31 DAY TERM	.00	1,013,279.79-	6,320,741.31-	6,320,741.31-	4,572,502.35-	00-
SAVINGS 91 DAY VARIABLE	.00	1,230,226.41-	1,071,374.05-	1,071,374.05-	43,457.53-	16,704.13-
SAVINGS 4 YR. 4% SIMPLE INT	43,577,104.44-	2,103,245.34-	37,334,727.23-	5,437,727.45	208,256.15	415.85-
SAVINGS 4 YR. 4% COMPOUND INT	398,132.28-	209,714.00-	173,522.25-	224,522.73	32,321.79	00-
TOTAL 4 YR WITH MONEY MARKET CORP	43,975,236.72-	41,750,409.02-	46,676,571.09-	2,731,291.42-	4,226,151.10-	17,119.95-
SAVINGS 30 MONTH DAILY COMP	23,221,437.31-	30,437,444.54-	30,335,433.25-	7,713,419.94-	597,607.71-	15,549.27
SAVINGS 30 MONTH COMPOUND	2,224,325.52-	1,169,213.21-	3,177,544.35-	243,222.19-	9,051.39-	00-
TOTAL 30 WITH VARIABLE RATE CORP	25,445,762.83-	31,606,657.75-	34,512,977.60-	7,244,455.12-	606,659.56-	15,549.27
SAVINGS 48 MONTH VARIABLE	.00	11,619.44-	11,619.44-	11,619.44-	.00-	00-
TOTAL 48 MONTH CERTIFICATES	.00	.00	.00	.00	.00	00-
SAVINGS 60 MONTH DAILY COMP	344,353.42-	300,249.50-	299,825.76-	45,252.86	442.74	00-
TOTAL 60 WITH VARIABLE RATE CORP	344,353.42-	311,269.23-	311,426.44-	33,432.39	442.74	00-
SAVINGS ALL SAVERS MONTHLY	262,703.33-	234,976.75-	174,329.24-	44,374.57	123,547.51	00-
SAVINGS ALL SAVERS ANNUAL	9,557,334.34-	12,543,331.55-	4,549,040.79-	6,022,921.95	5,985,850.57	101,593.41
TOTAL ALL SAVERS CERTIFICATE	2,930,535.67-	12,333,368.10-	4,732,370.22-	4,729,251.45	5,136,439.08	101,593.41
CERTIFICATE -VARIABLE RATE	79,274,250.34-	91,104,031.56-	90,649,215.17-	11,292,334.23-	454,745.39	100,022.73
SAVINGS JUNIOR QUARTERLY COMP	100,000.00-	.00-	.00-	177,000.00	.00-	00-
SAVINGS JUNIOR DAILY COMP	.00	.00	.00	.00	.00	00-
SAVINGS JUNIOR SIMPLE INT.	49,254,328.25-	77,447,203.62-	74,120,114.25-	2,445,724.70-	672,231.33-	789.03-
SAVINGS JUNIOR COMPOUND INT.	3,270,944.55-	2,052,288.25-	2,352,213.85-	313,557.90	302,600.30-	00-
SAVINGS JUNIOR APPORTIONED	.00	1,037,390.09-	1,097,935.33-	1,037,390.08-	.00-	00-
SAVINGS -COMPOUND JUNIOR APPORTIONED	.00	.00-	.00-	.00-	.00-	00-
JUNIOR CORP -VARIABLE RATE	72,625,234.30-	80,597,449.55-	81,570,439.98-	4,245,234.28-	972,931.33-	789.34-
NEW ACCOUNTS -MONTHLY	481,501.51-	1,047,537.20-	1,107,316.25-	257,449.45-	61,349.76-	321.65-
NEW ACCOUNTS -NONMONTHLY	454,409.32-	770,162.32-	352,714.53-	131,332.57-	32,525.57-	60.81-

	12/31/81 BALANCE	09/30/82 BALANCE	10/13/82	Y/Y DIFFERENCE	M/D DIFFERENCE	DAILY DIFFERENCE
* * T O T A L A S S E T S * *	326,645,667.30	345,532,369.75	330,046,018.81	23,400,351.51	4,513,649.06	1,846,924.11
SAVINGS PASSBOOK TCA 5.50	24,241,144.45-	31,703,783.77-	31,444,225.93-	3,054,411.52	180,542.16-	40,915.73-
SAVINGS CHRISTMAS CLUB T19 5.50	5,259.27-	50,469.70-	52,077.21-	53,709.94-	2,207.51-	.00-
SAVINGS STATEMENT T13 5.50	1,171,507.53-	1,223,234.33-	1,679,234.56-	577,767.03-	405,320.13-	34,492.63-
SAVINGS CERTIFICATES T07 5.50	164,233.94-	129,778.24-	130,027.00-	34,934.77	120.35-	.00-
SAVINGS -PASSBOOK RATE	26,284,574.11-	33,179,366.09-	33,765,556.79-	2,522,017.32	589,190.70-	75,409.13-
SAVINGS 12 TO 24 MONTHS T09 5.75	30,000.77-	19,259.54-	18,959.64-	11,241.08	.00-	.00-
SAVINGS 03 TO 12 MONTHS T00 5.00	77,492.15-	47,259.34-	47,059.94-	30,432.21	.00-	.00-
SAVINGS 24 TO 60 MONTHS T08 5.00	245,589.95-	166,291.33-	156,710.67-	93,974.18	9,531.16	.00-
SAVINGS 90 DAY NOTICE T10 6.00	393,334.39-	191,306.23-	201,976.41-	191,659.57	10,430.38-	.00-
SAVINGS 12 TO 24 MONTHS T03 6.50	1,400,592.36-	985,292.52-	979,522.30-	427,000.56	8,400.32	.00-
SAVINGS 30 TO 60 MONTHS T06 6.75	593,913.79-	329,690.32-	329,690.32-	254,331.47	.00-	.00-
SAVINGS 48 MONTHS T05 7.50	11,223,544.06-	5,473,574.68-	4,237,614.32-	7,665,441.74	240,390.36	.00-
SAVINGS 72 MONTHS T11 7.75	7,240,431.79-	4,735,212.45-	4,693,854.69-	2,651,577.11	45,177.97	.00-
SAVINGS 96 TO 120 Mths. T15 8.00	2,340,219.30-	1,462,100.37-	1,457,632.11-	222,527.33	4,503.26	.00-
CERTIFICATES -FIXED RATES	24,230,121.19-	12,419,090.28-	12,116,850.39-	12,116,270.80	239,237.69	.00-
SAVINGS IRA/REGULOM FLOATING T57	.00	35,325.33-	37,233.21-	37,251.21-	1,732.58-	.00-
SAVINGS IRA/REGULOM FIXES T59	.00	3,455,006.30-	3,673,673.67-	3,673,673.67-	115,665.77-	.00-
SAVINGS IRA/REGULOM 10,000 T59	.00	1,100,192.72-	1,100,497.24-	1,100,497.24-	1,225.68	.00-
TOTAL IRA/REGULOM CERTIFICATES	.00	4,485,525.35-	4,813,840.12-	4,915,497.12-	119,373.77-	.00-
SAVINGS -7 DAY NOTICE T40	.00	592,320.17-	1,146,423.71-	1,146,423.71-	554,603.52-	.00-
SAVINGS -31 DAY TERM T41	.00	1,718,277.32-	5,320,741.33-	5,320,741.33-	4,572,522.35-	.00-
SAVINGS 91 DAY VARIABLE T44	.00	1,070,926.43-	1,071,374.06-	1,071,374.06-	43,447.63-	15,704.13-
SAVINGS 6 MT. 4% SIMPLE INT T14	43,577,104.44-	24,103,265.35-	37,834,732.23-	5,642,737.45	208,956.15	415.95-
SAVINGS 6 MT. 4% CREDIT MAT T01	328,132.78-	200,214.00-	173,522.25-	224,520.73	32,321.75	.00-
TOTAL 6% WITH MONEY MARKET COIS	43,905,237.22-	41,750,402.98-	46,675,571.09-	2,721,291.42-	4,726,151.10-	17,119.35-
SAVINGS 30 MONTH DAILY COMP T17	23,221,337.31-	30,237,344.54-	30,935,433.25-	7,713,415.94-	597,607.71-	15,549.27
SAVINGS 30 MONTH CONT COMP T50	2,024,325.48-	3,169,213.01-	3,177,544.36-	253,233.13-	9,051.35-	.00-
TOTAL 30 WITH VARIABLE RATE COIS	25,245,662.79-	33,406,557.55-	34,113,019.11-	7,244,355.12-	606,659.06-	15,549.27
SAVINGS 42 MONTH VARIABLE T51	.00	11,619.24-	11,619.24-	11,619.24-	.00-	.00-
TOTAL 42 MONTH CERTIFICATES	.00	.00	.00	.00	.00	.00-
SAVINGS 48 MONTH DAILY COMP T14	344,352.52-	300,269.50-	292,835.76-	45,257.86	432.74	.00-
TOTAL 48 WITH VARIABLE RATE COIS	344,352.52-	311,269.28-	311,426.54-	33,432.28	42.74	.00-
SAVINGS ALL SAVERS MONTHLY T45	222,703.33-	224,075.75-	174,370.24-	44,374.53	123,547.51	.00-
SAVINGS JUMP START ANNUAL T44	8,557,234.34-	12,543,331.55-	4,553,250.99-	4,000,971.85	5,285,950.57	101,593.41
TOTAL ALL SAVERS CERTIFICATE	8,557,234.34-	12,543,331.55-	4,553,250.99-	4,000,971.85	5,105,478.78	101,593.41
CERTIFICATE -VARIABLE RATE	79,294,750.34-	91,104,031.56-	90,649,245.17-	11,257,330.23-	454,765.39	100,022.73
SAVINGS JUMP 3 QUARTELY COMP T31	100,000.00-	.00-	.00-	177,000.00	.00-	.00-
SAVINGS JUMP 2 DAILY COMP T32	.00	.00-	.00-	.00	.00	.00-
SAVINGS JUMP 3 SIMPLE INT. T30	40,254,368.25-	77,447,203.62-	73,120,134.75-	4,845,725.70-	672,231.33-	789.04-
SAVINGS JUMP 3 CREDIT MAT T32	3,270,344.55-	2,052,288.85-	2,352,213.85-	913,557.90	300,000.00-	.00-
SAVINGS JUMP 3 PARTIALLY T43	.00	1,027,296.08-	1,027,296.08-	1,027,296.08-	.00-	.00-
SAVINGS -CONTRA JUMP 3 PROMISED	.00	.00-	.00-	.00-	.00-	.00-
JUMP 3 COIS -VARIABLE RATE	72,625,234.90-	80,597,449.55-	81,570,439.90-	4,945,234.28-	972,231.33-	789.04-
NOW ACCOUNTS -TERMINATED T41	451,501.51-	1,047,237.20-	1,137,336.95-	257,435.45-	61,349.76-	321.65-
NOW ACCOUNTS -NONTERMINATED T40	454,409.02-	770,162.32-	852,713.57-	121,390.57-	82,525.67-	60.87-

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PCT OF SAV. AT PASSBOOK TO TOTAL	16.9563	15.1451	15.0024
PCT OF SAV. AT FIXED CD TO TOTAL	11.3225	5.6476	5.3935
PCT OF SAV. AT VAR CD TO TOTAL	37.0546	41.5308	40.2752
PCT OF SAV. AT JUMPRO TO TOTAL	33.9369	35.7903	36.2415
PCT OF SAV. AT NOW RATE TO TOTAL	.7037	.8297	.8731

10/13/82

***** DAILY STATISTICAL REPORT *****

PAGE 3

ACCOUNT DESCRIPTION		09/30/82 BALANCE	10/13/82 BALANCE	M/D DIFFERENCE	DAILY DIFFERENCE
ADVANCES -LONG TERM	FHLB	15,630,000.00-	16,630,000.00-	.00-	.00-
ADVANCES -SHORT TERM	FHLB	73,920,000.00-	73,920,000.00-	.00-	.00-
ADVANCES -FHLB		90,550,000.00-	90,550,000.00-	.00	.00
ADVANCES -SHORT TERM	NBW	4,000,000.00-	.00-	4,000,000.00	4,000,000.00
ADVANCES -SHORT TERM	ASB	.00-	.00-	.00-	.00-
ADVANCES -SHORT TERM	NSBT	.00-	.00-	.00-	.00-
SHORT TERM BANK ADVANCES		4,000,000.00-	.00-	4,000,000.00	4,000,000.00
ADVANCES -REVERSE PURCHASE	PL	.00-	.00-	.00-	.00-
ADVANCES -REVERSE PURCHASE	BVA	2,177,000.00-	5,027,000.00-	2,850,000.00-	.00-
ADVANCES -REVERSE PURCHASE	BZ	7,044,443.93-	5,498,708.42-	1,545,735.51	5,475.99-
ADVANCES -REVERSE PURCHASE	RFI	9,476,500.00-	8,431,370.00-	1,045,130.00	.00-
ADVANCES -REVERSE PURCHASE	NPA	.00	.00	.00	.00
ADVANCES -REVERSE PURCHASE		19,399,974.96-	20,967,079.92-	1,567,104.96-	5,635.99-
ADVANCES FROM ALL SOURCES		113,940,974.96-	113,917,079.92-	23,895.04	3,226,333.01

PERCENT OF APPROVED MONEY TO TOTAL ASSETS 31.8924 PCT
 DOLLAR AMOUNT OF APPROVED MONEY UNDER 20 PCT \$ 40,207,875.22-

OVER ALL LIQUID ASSET RATIO - ACTUAL	10.3435	PCT
OVER ALL LIQUID ASSET RATIO - REQUIRED	1.0000	PCT
OVER ALL LIQUID ASSET RATIO - DIFFERENCE	\$ 16,501,311.61	
SHORT TERM LIQUID ASSET RATIO - ACTUAL	10.3435	PCT
SHORT TERM LIQUID ASSET RATIO - REQUIRED	1.0000	PCT
SHORT TERM LIQUID ASSET RATIO - DIFFERENCE	\$ 28,253,744.48	

LIQUIDITY BASE 303,310,921.86

LONG TERM LIQUID ASSET .00

MONTH/DATE 10/13/82

GRASS SAVINGS RECEIPTS	101,049,706.87-	4,640,722.15-
GRASS SAVINGS DISBURSEMENTS	95,034,741.14	3,238,217.82
PAYMENTS ON PERMANENT MORTGAGES - REGULAR	2,409,130.76-	623,833.34-
PAYMENTS ON PERMANENT MORTGAGES - PAYOFFS	63,551.20	.00
PAYMENTS ON PERMANENT MORTGAGES - TOTAL	2,471,681.96-	623,833.34-

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NOW ACCOUNTS	T43	.30	.00	2,975.31-	2,975.01-	.03-
TOTAL NOW ACCOUNTS		1,505,909.53-	1,917,700.12-	1,955,150.55-	659,261.33-	382.54-
SAVINGS/NOW -DAILY CLEARING		55,761.19-	43,895.87	5,035,461.47-	4,757,730.29-	5,425,946.38-
TOTAL DEPOSITS		214,000,531.35-	219,009,799.53-	225,074,744.25-	11,074,222.41-	5,402,504.33-

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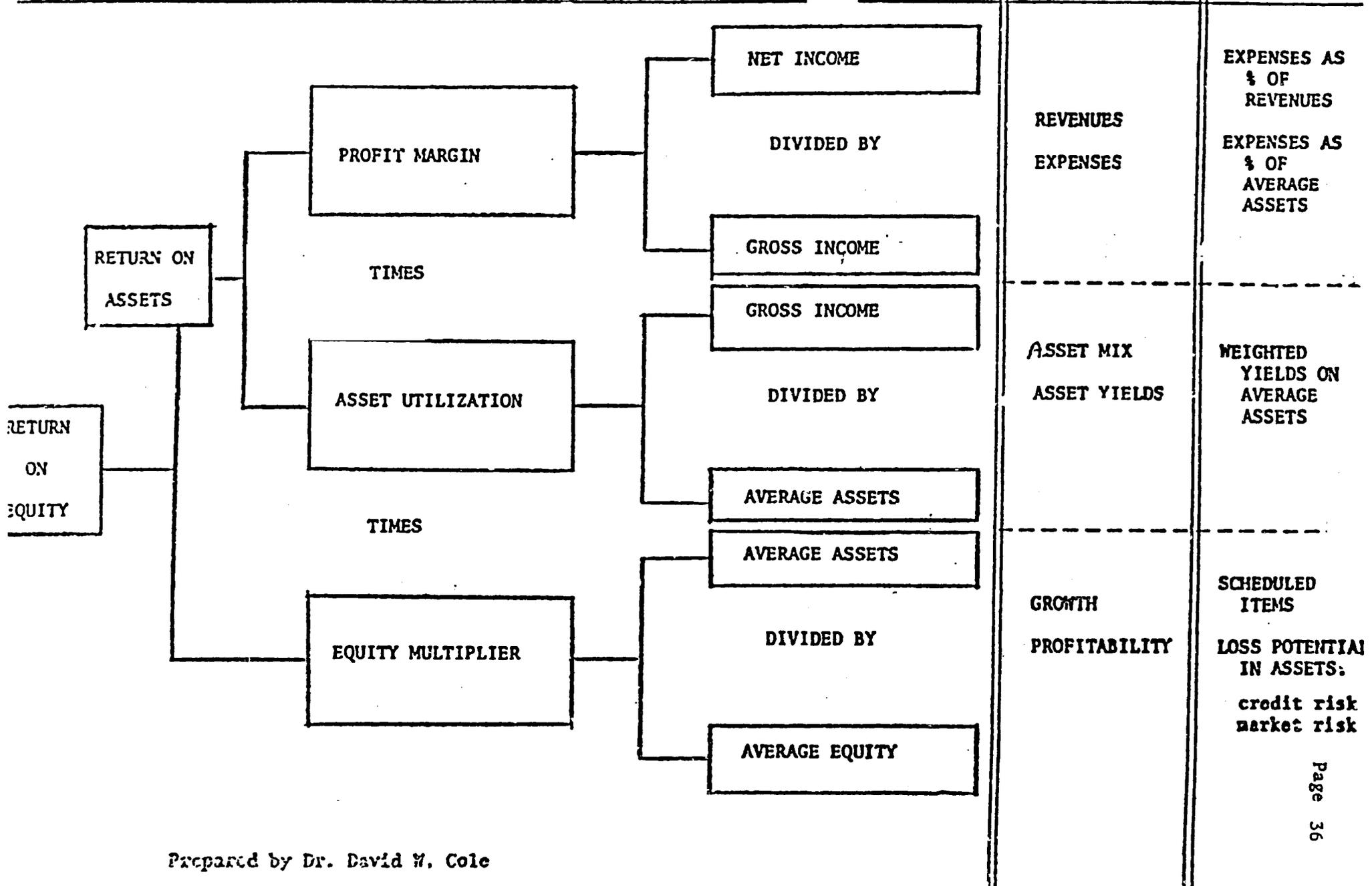
AC	ACCOUNT NO.	NAME	DAILY DIFFERENCE		MONTH DIFFERENCE		DATE 10/13/92		DATE 10/13/92		***** COMMENTS *****
			NO	DIFFERENCE	NO	DIFFERENCE	Y.T.D. NO	DIFFERENCE	Y.T.D. NO	DIFFERENCE	
40	4750-001-7	NORTHEAST 001		.00	1	1.13	100	2,004.0	100	2,004.04	
50	4750-002-5	DOWNTOWN 002		.00	1	.02-	47	1,751.5	47	1,751.50	
40	4750-003-7	VAN NESS 003	1	20.00-	5	14.19-	145	2,079.0	145	2,079.05	
50	4750-004-1	LAFAYETTE 004	1	499.00	5	503.75	37	309.7	37	309.74	
50	4750-005-8	FONHALL 005		.00	6	1,013.39-	47	235.4	47	235.49-	
50	4750-006-4	TAKOMA P 006		.00	1	4.00	32	5,334.1	32	5,334.15-	
50	4750-007-4	19TH E W 007	1	6.35-	2	2.13	63	3,178.1	63	3,178.17	
40	4750-008-2	15TH ST 008		.00	4	9.76-	70	653.7	70	653.79	
50	4750-010-8	MAGARINER 010		.00		.00	17	6,370.9	17	6,370.93	
50	4750-011-6	SOUTHEAST 011	2	.10-	9	49.34	104	2,517.4	104	2,517.61	
40	4750-040-4	MAIL 040		.00	2	.00-	5	6.0	5	6.05	
TOTAL OF ALL BRANCHES OVER/SHORT			5	472.45	36	479.21-	713	10,179.3	713	10,179.30	

* * RETURNED CHECKS * *

AC	ACCOUNT NO.	NAME	DAILY DIFFERENCE		MONTH DIFFERENCE		DATE 10/13/92		DATE 10/13/92		***** COMMENTS *****
			NO	DIFFERENCE	NO	DIFFERENCE	Y.T.D. NO	DIFFERENCE	Y.T.D. NO	DIFFERENCE	
40	4780-001-1	NORTHEAST 001		.00		.00	14	141.2	14	141.35-	
50	4780-002-0	DOWNTOWN 002		.00		.00	7	79.7	7	79.93-	
50	4780-003-7	VAN NESS 003		.00		.00	17	1,645.0	17	1,645.62	
50	4780-004-5	LAFAYETTE 004		.00		.00	14	2,117.7	14	2,117.97	
50	4780-005-3	FONHALL 005		.00	1	50.70	14	3,573.3	14	3,573.34	
50	4780-006-0	TAKOMA P 006		.00	1	12,000.00-	17	10,744.2	17	10,744.29-	
50	4780-007-8	19TH E W 007		.00		.00	37	149.0	37	149.00-	
50	4780-008-4	15TH ST 008		.00	1	1,000.00-	36	250.3	36	250.34	
50	4780-010-2	MAGARINER 010	2	492.80	4	493.90	37	370.5	37	370.50	
50	4780-011-0	SOUTHEAST 011		.00		.00	251	2,374.1	251	2,374.12	
40	4780-012-2	FUNDS TOA 012		.00		.00	7	.0	7	.00	
50	4780-020-0	SAVINGS DEPT	2	121.52	4	2,532.45-	37	3,431.0	37	3,431.95-	
TOTAL ALL RETURNED CHECKS			4	674.42	15	1,633.45-	497	10,359.2	497	10,359.87	

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PROFIT MODEL



10. As % of Average Earning Assets:

a. Net Interest Margin

b. Net Non-Interest Margin

c. Income Taxes

d. Return on Earning Assets

IV. YIELD REQUIRED TO BREAK EVEN:

11. As % of Average Total Assets:

a. Interest Expense

b. + Provision for Loan Losses

c. + Non-Interest Expenses

d. - Non-Interest Income

e. = Interest Yield on Total Assets
(Break-Even)

12. As % of Average Earning Assets:

a. Interest Expense

b. + Provision for Loan Losses

c. + Non-Interest Expenses

d. - Non-Interest Income

e. = Interest Yield on Earning Assets
(Break-Even)

V ANALYSIS OF PROFIT MARGIN:

13. Operating Expenses/Operating Income:

a. Salaries and Wages

b. Officer and Employee Benefits

c. Interest on Deposits

d. Interest on Borrowed Money

e. Net Occupancy Expense of Premises

f. Provision for Loan Losses

13.	<u>Operating Expenses/Operating Income:</u>		
	<u>g. All Other Operating Expenses</u>		
	<u>h. Income Taxes</u>		
	<u>i. Net Securities Gains or Losses</u>		
14.	<u>Operating Expenses/Average Assets:</u>		
	<u>a. Salaries, Wages and Fringe Benefits</u>		
	<u>b. Interest on Deposits</u>		
	<u>c. Net Occupancy Expense of Premises</u>		
	<u>d. All Other Operating Expenses</u>		
15.	<u>Interest Paid/Total Savings Deposits</u>		
16.	<u>Income Taxes/Net Operating Earnings</u>		
VI	<u>ANALYSIS OF ASSET UTILIZATION:</u>		
17.	<u>Return on Loans</u>		
18.	<u>Return on U. S. Treasury Securities</u>		
19.	<u>Return on Federal Agency Securities</u>		
20.	<u>Return on State & Local Gov't Securities</u>		
21.	<u>Return on Other Securities</u>		
22.	<u>Distribution of Total Assets:</u>		
	<u>a. Cash Assets</u>		
	<u>b. U. S. Treasury Securities</u>		
	<u>c. Other Securities</u>		
	<u>d. Loans</u>		
	<u>e. Premises and Equipment</u>		
	<u>f. Other Assets</u>		

23. Distribution of Loans: (Year End)

a. First Mortgage Loans: Residential

b. Construction Loans

c. Commercial Loans

d. Consumer Loans

e. All Other Loans

24. Other Operating Income/Operating Income

VII. ANALYSIS OF LIQUIDITY: (Year End)

25. Cash Assets/Deposits

26. Legal Liquidity

27. Loans/Deposits

28. Large Unit Certificates/Total Deposits

29. Percentage of Investment Securities
Maturing Within Two Years

VIII. ANALYSIS OF EQUITY MULTIPLIER AND SOLVENCY: (Year End)

30. Capital Accounts and Reserves/Total Assets

31. Capital Account and Reserves/Risk Assets

32. Capital Accounts and Reserves/Loans

33. Loan Loss Provision/Non-Cash Assets
(Three Year Average)

34. Net Earnings/Non-Cash Assets

35. Required Earnings (2 x Loan Losses
Divided by Non-Cash Assets)

36. Equity Capital/Non-Cash Assets

37. Required Equity (40 x Loan Losses
Divided by Non-Cash Assets)

38. F. I. R. Ratio

IX.

ANALYSIS OF GROWTH:39. % Change in Total Assets40. % Change in Loans41. % Change in Deposits42. % Change in Capital Accounts43. % Change in Total Operating Income44. % Change in Operating Expenses45. % Change in Net Income46. Internal Generation of Equity Capital47. Break-Even Growth Rate in AssetsX. COST OF FUNDS:48. Interest Paid on Deposits & Borrowings
Divided by Average Deposits & Borrowings49. X Average Deposits + Borrowings /
Average Assets50. = Interest Paid / Average Assets51. + Operating Costs / Average Assets52. + Desired Profit Before Taxes / Average Assets53. = Required Asset Utilization54. ./ . Ratio of Earning Assets / Total Assets55. = Required Yield on Earning Assets

**PROFITABILITY ANALYSIS
INCORPORATING SPREAD MANAGEMENT**

COMPANY Northwestern Federal S & L

YEAR 1975 & 1974

	% OF GROSS REVENUES 000's		- % OF AVERAGE TOTAL ASSETS		% OF AVERAGE EARNING ASSETS	
	1975	1974	1975	1974	1975	1974
1. Interest Income	4,730 94.1883	4,518. 96.1658	6.7996	6.6241	6.9296	7.1192
2. Interest Expense	3,902 77.6962	3,730 79.3925	5.609	5.4687	5.7162	5.8774
3. NET INTEREST MARGIN	828 16.492	788 16.7733	1.1906	1.1554	1.2133	1.2418
4. Non-Interest Income	291 5.8117	180 3.8342	.4196	.2641	.4276	.2639
5. Non-Interest Operating Expenses	942 18.7736	859 18.2881	1.3553	1.2597	1.3812	1.2588
6. NET NON-INTEREST OPERATING MARGIN	(651) (12.9619)	(679) (14.4539)	(.9357)	(.9956)	(.9536)	(.9949)
7. INCOME TAXES	120 2.3891	19 .4149	.1725	.0286	.1758	.0286
8. PROFIT MARGIN	57 1.1410	89 1.9043	X X X	X X X	X X X	X X X
9. RETURN ON ASSETS	X X X	X X X	.08237	.1312	X X X	X X X
10. RETURN ON EARNING ASSETS	X X X	X X X	X X X	X X X	.08395	.14098

Average Total Assets

1974 68,218,140
1975 69,574,779

Average Earning Assets

1974 63,474,341
1975 68,269,294

Gross Revenue

1974 4,699,021
1975 5,022,677

**PROFITABILITY ANALYSIS
INCORPORATING SPREAD MANAGEMENT**

COMPANY Northwestern Federal S & L

YEAR 1976 & 1975

	% OF GROSS REVENUES '00's		% OF AVERAGE TOTAL ASSETS		% OF AVERAGE EARNING ASSETS	
	1976	1975	1976	1975	1976	1975
1. Interest Income	\$ 6,131 94.469	\$ 4,730 94.1883	7.235	6.7996	7.7451	6.9296
2. Interest Expense	\$ 4,890 75.354	\$ 3,902 77.6962	5.771	5.609	6.1779	5.7162
3. NET INTEREST MARGIN	\$ 1,240 19.115	\$ 828 16.4921	1.464	1.1906	1.5671	1.2133
4. Non-Interest Income	\$ 358 5.531	\$ 291 5.8117	.4236	.4196	.4535	.4276
5. Non-Interest Operating Expenses	\$ 1,374 21.173	\$ 942 18.7736	1.622	1.3553	1.7359	1.3812
6. NET NON-INTEREST OPERATING MARGIN	\$ (1,015) (15.642)	\$ (651) (12.9619)	(1.198)	(.9357)	(1.2824)	(.9536)
7. INCOME TAXES	\$ 61 943	\$ 120 2.3891	.0722	.1725	.07731	.1758
8. PROFIT MARGIN	\$ 164 2.530	\$ 57 1.1410	X X X	X X X	X X X	X X X
9. RETURN ON ASSETS	X X X	X X X	.1937	.08237	X X X	X X X
10. RETURN ON EARNING ASSETS	X X X	X X X	X X X	X X X	.20741	.08395

Average Total Assets
1975 \$ 69,574,779
1976 \$ 84,744,782

Average Earning Assets
1975 \$ 68,269,294
1976 \$ 79,163,359

Gross Revenue
1975 \$ 5,022,677
1976 \$ 6,490,214

**PROFITABILITY ANALYSIS
INCORPORATING SPREAD MANAGEMENT**

COMPANY Northwestern Federal S & L

YEAR 1977 & 1976

	% OF GROSS REVENUES 000's		% OF AVERAGE TOTAL ASSETS		% OF AVERAGE EARNING ASSETS	
	1977	1976	1977	1976	1977	1976
1. Interest Income	\$ 7,171 94.786	\$ 6,131 94.469	7.491	7.235	8.0339	7.7451
2. Interest Expense	\$ 5,578 73.730	\$ 4,890 75.354	5.827	5.771	6.2493	6.1779
3. NET INTEREST MARGIN	\$ 1,593 21.055	\$ 1,240 19.115	1.664	1.464	1.7846	1.5671
4. Non-Interest Income	\$ 399 5.277	\$ 358 5.531	.4171	.4236	.4473	.4535
5. Non-Interest Operating Expenses	\$ 1,345 17.782	\$ 1,374 21.173	1.405	1.622	1.5072	1.7359
6. NET NON-INTEREST OPERATING MARGIN	\$ (946) (12.505)	\$ (1,015) (15.642)	(.9883)	(1.198)	(1.0599)	(1.2824)
7. INCOME TAXES	\$.161 2.134	\$.61 .943	.1687	.07222	.18092	.07731
8. PROFIT MARGIN	\$ 485 6.416	\$ 164 2.530	X X X	X X X	X X X	X X X
9. RETURN ON ASSETS	X X X	X X X	.5071	.1937	X X X	X X X
10. RETURN ON EARNING ASSETS	X X X	X X X	X X X	X X X	.54379	.20741

Average Total Assets

1977 \$ 95,735,238
1976 \$ 84,744,782

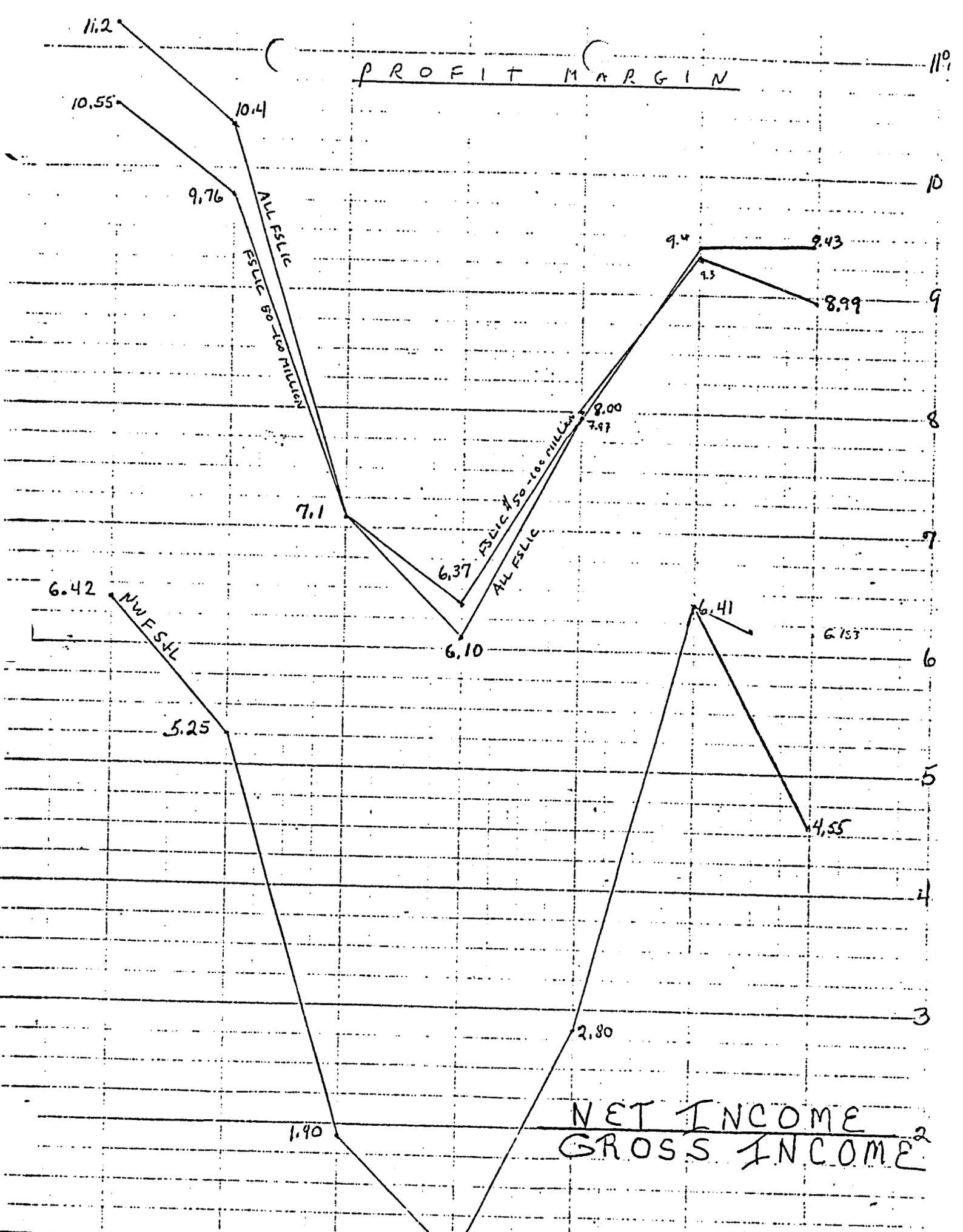
Average Earning Assets

1977 \$ 79,163,359
1976 \$ 89,268,309

Gross Revenue

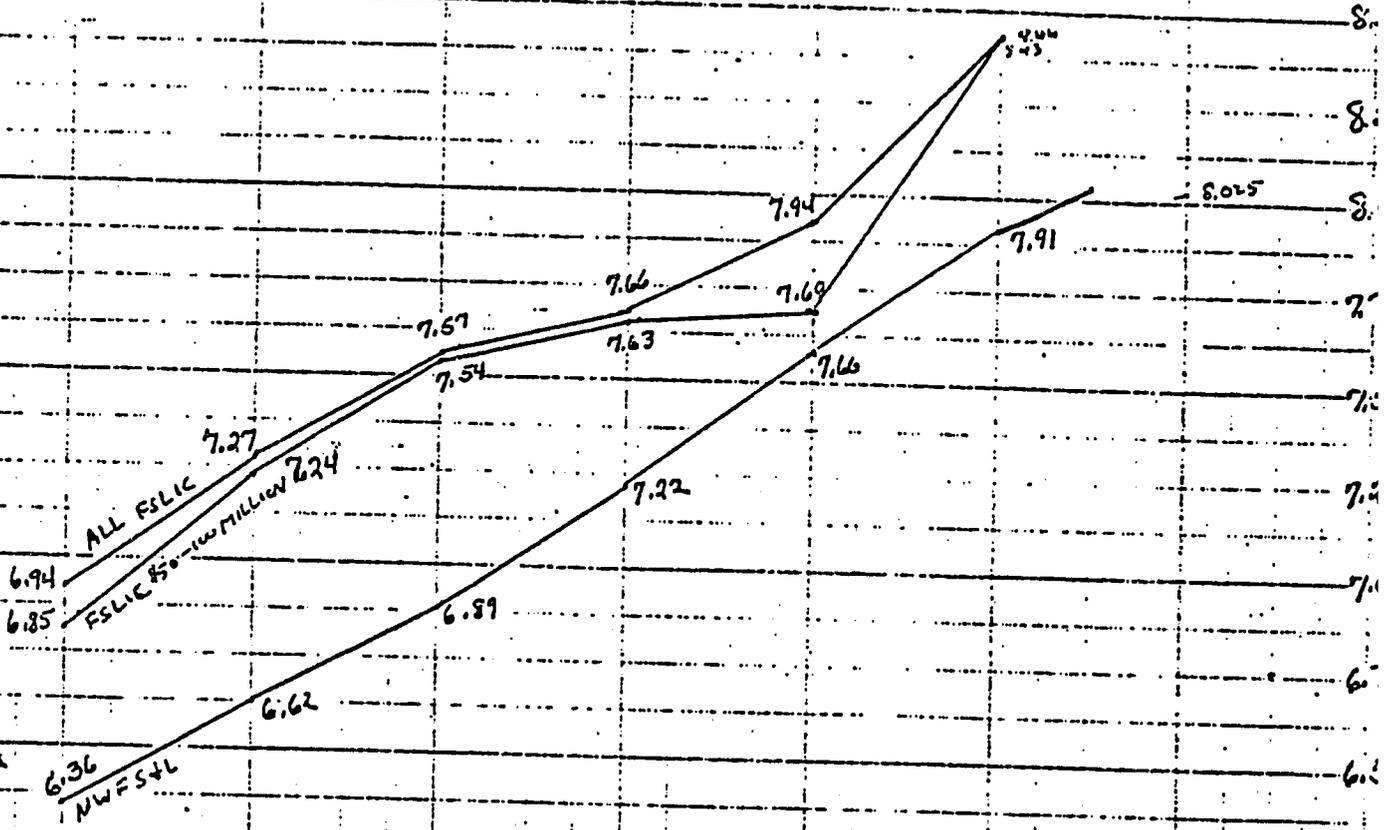
1977 \$ 7,566,234
1976 \$ 6,490,214

PROFIT MARGIN



NET INCOME
GROSS INCOME

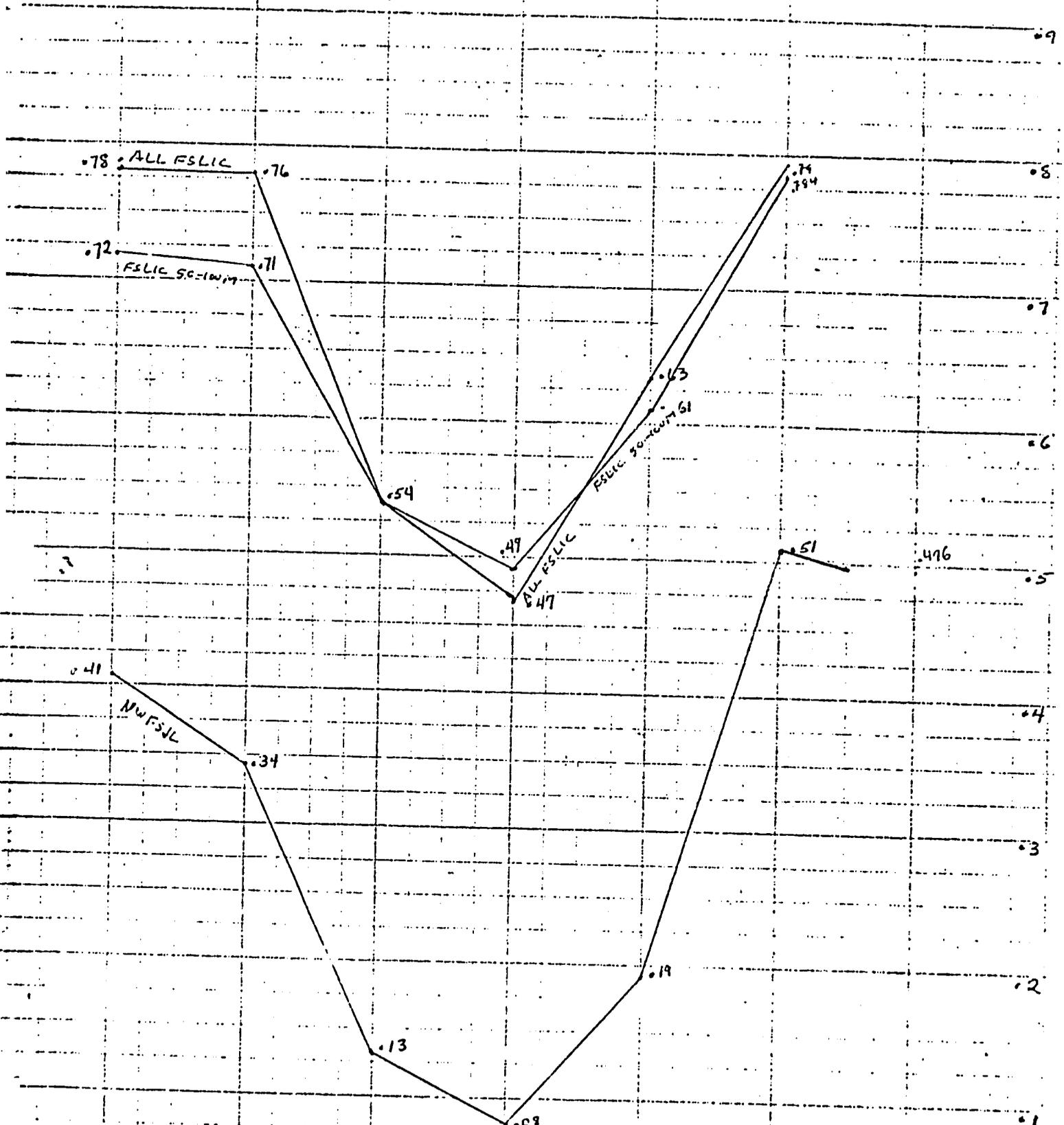
A S S E T U T I L I Z A T I O N



GROSS INCOME
AVERAGE ASSETS

RETURN ON ASSETS

1.0



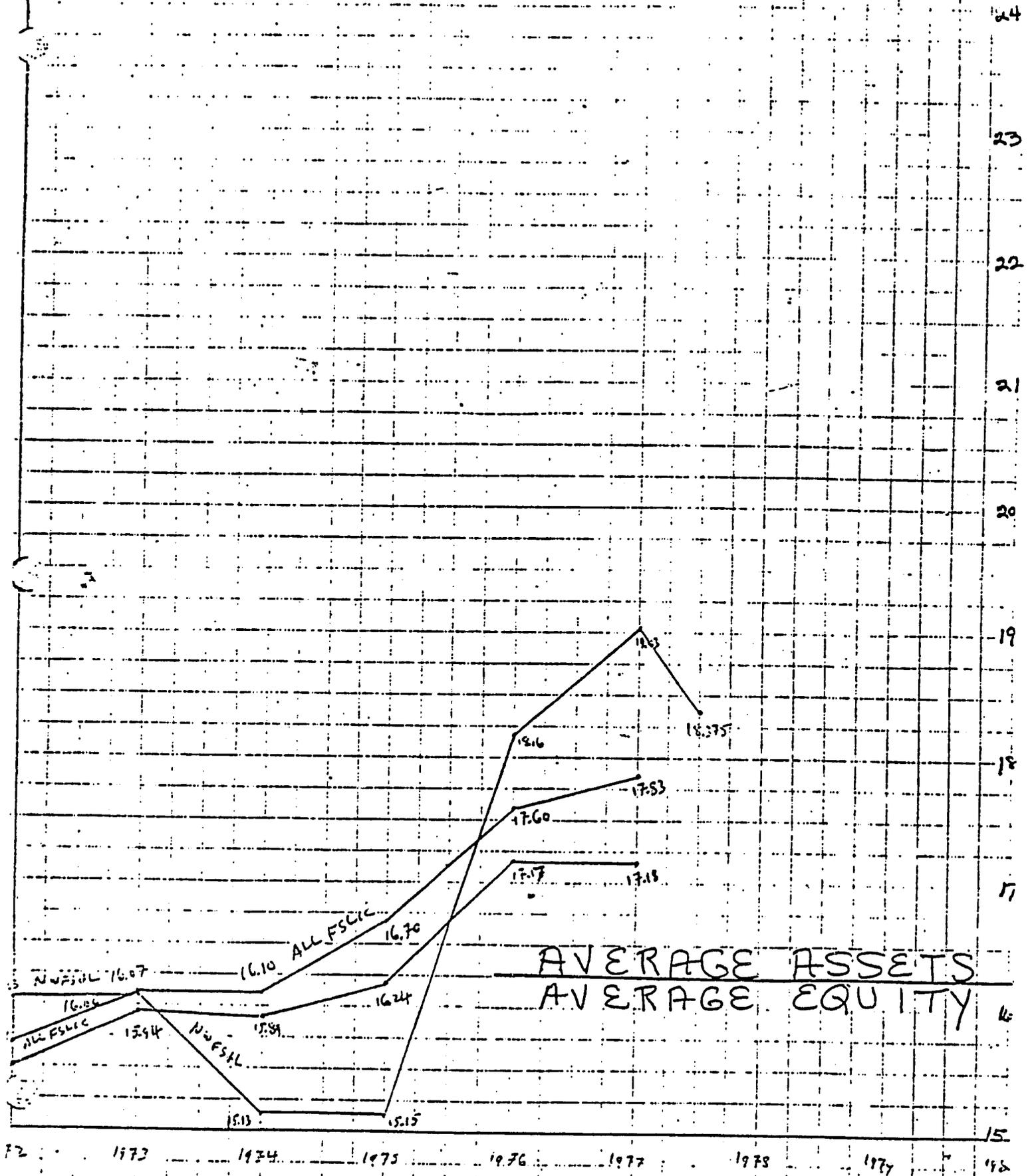
NET PROFIT X ASSET UTILIZATION

FIRST
HALF

MAILED BY:
E 12/9/77 19 72

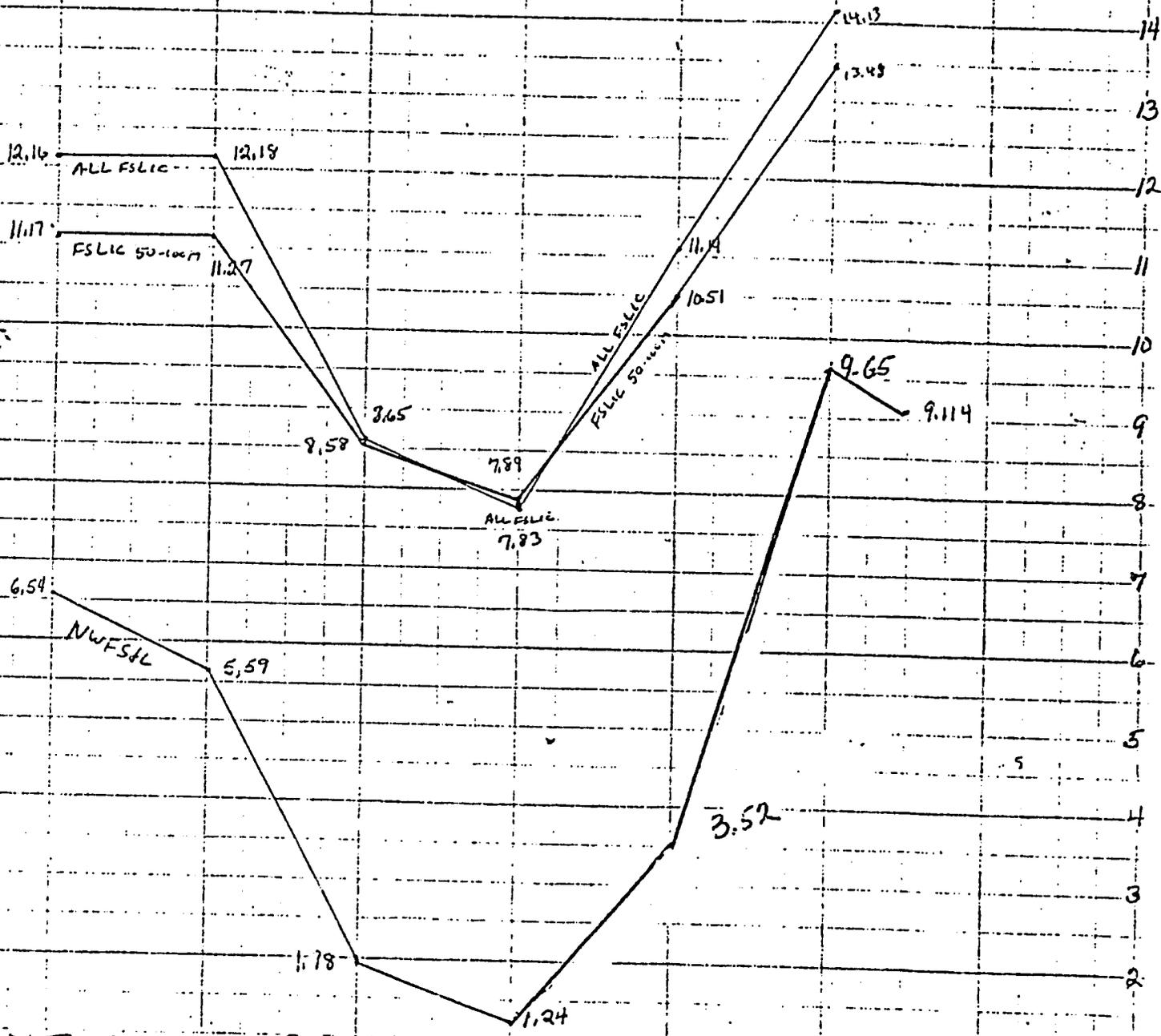
19 73 19 74 19 75 19 76 19 77 19 78

EQUITY MULTIPLIER



AVERAGE ASSETS
AVERAGE EQUITY

RETURN ON EQUITY

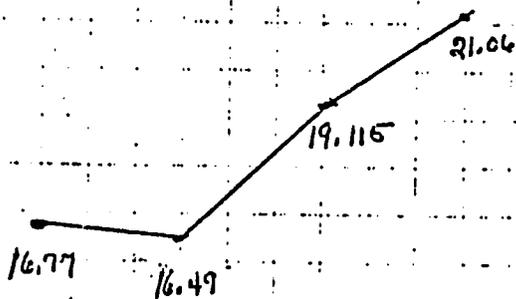


RETURN ON ASSETS X EQUITY MULTIPLIER

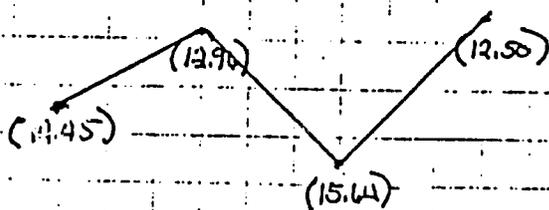
SPANNED BY: E 12/9/77 1972

1973 1974 1975 1976 1977 1978

1973 1974 1975 1976 1977 1978 1979



NET INTEREST MARGIN
AS % OF GROSS REVENUES.



NET NON INTEREST OPERATING MARGIN
AS % OF GROSS REVENUES.

28
26
24
22
20
18
16
14
12
10
0
- 10
- 12
- 14
- 16
- 18
- 20
- 22
- 24
- 26
- 28

ECONOMICS OF HOUSING SUBSIDIES

Richard T. Pratt

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INTRODUCTION

The Popularity of Subsidies

The existence of housing subsidies is found in many countries ranging from the least developed, agrarian societies to the most highly developed, industrial nations. The proliferation of housing subsidies indicates the political popularity.

Goals

The generally stated purpose of such subsidies is to improve the quality of housing in that nation and a broader, implied purpose is to improve the quality of life. While the goals may be worthy, their accomplishment is unlikely both because of the economic realities of the concerned countries and the generally counterproductive nature of the subsidy programs themselves. The achievement of housing goals is often actually hampered by the misuse of subsidies and the consequent adverse economic effects. Many housing policies are economically unrealistic and tend to generate unachievable expectations on the part of both housing administrators and households. Too often these high expectations are a result of a basic misunderstanding of the potential and the nature of subsidies. The inevitable consequence of misapplied and misunderstood subsidy programs is the disillusionment and unrest of the nation's citizens and the wasting of resources on vain hopes.

THE NATURE OF SUBSIDIES

The Definition of Housing Subsidies

Housing subsidies are transfers of income to purchasers of housing, or non-owner consumers of housing services. The transfer of income is a restricted one in that the income either in a money form or in kind must be directly applied to the purchase of housing and housing services. Because housing subsidies represent a type of transfer payment, they also require an offsetting transfer in the form of a tax on other entities within the economy. The total concept of a housing subsidy then is the imposition of a tax on certain segments of the economy combined with a restricted income transfer to the recipients of the subsidy. For a given level of production or investment the economic cost of the housing services produced is essentially independent of the existence of the subsidy. The real cost of providing housing services, that is the use of capital, materials, labor, and land, is not reduced by the existence of the subsidy. Subsidy programs may redistribute housing costs among groups but they cannot reduce these costs. As will be shown later, most housing subsidy programs provide households with more housing services than they would consume given complete control over their expenditures.

Misconceptions

In attempting to assess the true nature of subsidies it is necessary to clear away some of the misconceptions concerning them.

Housing subsidies do not reduce national cost of the subsidized service. For a given level of production or investment, the economic cost is essentially independent of the existence of subsidy. The cost of housing, for example, is the cost of capital, material, and labor resources which are devoted to the housing sector. Subsidy programs may redistribute housing cost among groups but they cannot reduce these costs. A housing subsidy is a transfer of income to a household for the purpose of providing them housing services greater than that which they could or would consume from their incomes.

The Rationale for Subsidy

Housing subsidies (as with other forms of subsidy), whether to all households or limited to lower income groups, are rooted in the belief that households will choose a less than optimal level of housing investment and must be induced to purchase, or consume, greater housing services than they would choose in a market setting. The existence of poverty level households does not provide sufficient rationale for housing subsidies. The existence of impoverished households within an economy may be a justification for downward income redistribution, however, it does not justify channeling redistributed funds directly into housing.

In the absence of major housing market imperfections housing subsidies will always be economically inferior to income supplements. Under most circumstances, households do not have a "housing problem"; they have only an "income" problem. Housing is generally available for those who have the ability to pay. Housing services are inadequate,

based on physical standards, because households do not have sufficient income to afford higher housing standards. Unless it is believed that "special" social benefits are derived from housing, households will benefit more from an unrestricted increase in their income than from being provided housing services of equal value. While frequent claims are made concerning the existence of positive externalities associated with housing there is little evidence to support these claims.

An example may make the suboptimization of housing subsidies clearer. Assume that a household has an annual income of \$10,000, and that based on its need for food and other necessities, the household wishes to spend 15 percent of its income in acquiring a housing unit. This household then will spend \$1,500 per year for its housing services ($.15 \times \$10,000$). This housing payment will allow the purchase of a unit requiring a debt service of approximately \$14,140¹. If the government is willing and able to provide this family with a dwelling costing \$25,000, the debt service required for this unit may be approximated as \$2,652 per year². By providing this unit, the government has theoretically increased the household's income by \$1,152 per year, or 11.5 percent; and has substantially increased the percent of income used for housing.

If, instead of providing the house, the government were to provide the family with an additional \$1,152 per year, the family

¹\$14,244 is the size of a loan which could be paid off with monthly payments payable with \$1,500 per year over a 30-year period at 10 percent interest.

would have a total spendable income of \$11,152 per year. If the household had received this income as case, and if their desire for housing still approximated 15 percent of income, the actual desired housing expenditure would be \$1,673 per annum. This would be consistent with a housing unit having a value of \$15,771. Thus, the government has placed the family in a home having a value approximately \$9,000 greater than the one which would provide them the highest level of satisfaction given the total resources available to them. By providing a deep housing subsidy, the government has provided more housing services than the individual household wishes to consume given its income.

Problems with Subsidies

Several problems may be associated with housing subsidy policies.

Five common problems are:

1. The incentive to consume scarce resources,
2. Inequitable income distribution effects,
3. Dissolution of housing capital,
4. Intertemporal implications for taxation and spending, and
5. Market disruptions.

Consumption of Scarce Resources

The laws of supply and demand dictate that the lower the price of a commodity, the more of that commodity will be demanded and consumed. Subsidy programs which mask the true cost of resources to the housing services consumer result in an inefficient use of these resources. For example, in Korea, a rapidly growing economy,

capital for that growth is very limited. The practice of subsidizing interest rates by making housing finance loans at rates as low as three percent, when market rates may range from 20 to 40 percent, both misallocates capital toward housing and at the same time assures a shortage of funds at the subsidized rate. Consumption of scarce resources is not only encouraged through lowering of cost, but, as was pointed out in the previous section, consumption of housing services in excess of those desired by low income assisted families given their total income is encouraged when the government provides a housing subsidy as opposed to an income supplement.

Equity Problems in Housing Subsidy

The provision of widespread deep subsidies results in demand exceeding supply even in wealthy countries. The fact that governments must limit the amount of resources transferred to the housing sector typically results in the granting of large subsidies to a small proportion of the populace. Recipients may be chosen on an arbitrary basis or perhaps more commonly on the basis of their perceived political power. Civil servants, police, and military are frequently favored groups. Frequently housing subsidies result in the development of uneven housing stock composed of a few units with excessively high physical standards and a great proliferation of substandard units. Subsidy programs are often used to provide a showcase for government involvement in social programs. The result is inequitable income distribution between a few households receiving high quality subsidized housing and the many households receiving no housing assistance at all.

Dissolution of Housing Capital

Many housing subsidy programs lead to the depletion of scarce housing funds. Subsidies are often in the form of low interest rate loans with the payment schedule requiring fixed, periodic payments. When loan rates are inadequate to cover the real cost of funds, the value of the housing finance fund diminishes over time and eventually is insufficient to finance a meaningful volume of sales. Governments frequently fail to make a vigorous attempt to recover the payments from their debtors, further reducing the amount of capital recovered. In some cases the combined effects of inflation and initial deep subsidies has made the cost of collecting housing payments greater than the value of the payments. In addition, the government has made a subsidy to the borrower in excess of that which was anticipated and in excess of that which the government felt the recipient needed at the time the subsidy was made. This reduces the ability of the government to spread the subsidy benefits to a larger group of citizens.

Intertemporal Subsidy Problems

Many subsidy programs can be misleading in that their expenses can balloon over time. Often decision makers unintentionally commit future resources under conditions which will generate problems for succeeding governments. For example, interest rate subsidies appear very favorably in initial years but can prove to be intolerably expensive in later years. An example of this will be shown later. Cost runaways can also occur

if the government fails to set up sufficient accounting methods to constantly monitor the real cost of their program.

Market Disruptions

Subsidy programs, especially those which attempt to control factor prices may substantially distort and hamper the operation of markets. For example, many countries impose rent controls under the guise of a rent subsidy. For example, in Egypt rental levels in private units under rent control and in public housing units have been so low that, in many cases, the payments collected from occupants are not sufficient to provide maintenance and replacement services for the projects involved. As a result the existing rental stock is deteriorating and the market is not providing any new housing for the rent controlled sector. These kinds of subsidies tend to impose a direct tax on owners of rental units. This direct tax lowers the expected rate of return on new housing construction below other market opportunities and effectively stops investment in rental units.

Methods of Subsidizing Housing

There are endless direct and indirect subsidies for a wide variety of purposes. For example, consider the following example of housing subsidies existing in both developing and developed countries.

1. The sale of land by the government or public sector firms at a price below the fair market value,

2. Provisions of infrastructure, utility hook-ups, and utility services at less than the cost of the service,
3. The provision of rental housing by local authorities at less than the market value or full cost of such housing,
4. The provision of funds from the banking sector at rates that may be below the true cost of long term capital,
5. The provision of mortgage loans from local government and cooperatives at interest rates less than cost,
6. Fixed payment schedules whose real value falls in inflationary economies,
7. The failure to vigorously collect existing contractual housing payments from occupants,
8. The provision of funds from the central bank to the housing banks at rates that are below the true cost of funds,
9. Direct government contributions and other government loans to public sector firms for the construction of low income public housing to be sold at less than fair market value.

Despite the apparent variety, all subsidies can be expressed and should be evaluated as one of two major types. The first of these is the interest rate subsidy involving the lending of funds by a government supported unit at less than the market rate of interest. The second general type is the capital subsidy which is provided at the time the housing asset or improvement is provided at less than cost or fair market value.

November 4, 1982

Paper for the Fourth Annual AID International Shelter Workshop
for Senior Professionals

Prepared by John de Monchaux, Dean, MIT School of Architecture
and Planning

CASE STUDY: DAGAT-DAGATAN, PHILIPPINES

In this paper I will look at the specific case of a major sites and services project in Manila, known as the Dagat-Dagatan Project from the point of view of the problems faced in implementing large scale new housing initiatives.

The Dagat-Dagatan Project is one element in a national housing program being undertaken by the National Housing Authority of the Philippines. NHA, as it is known, is a large (about 1500 staff) government agency, devoted to housing delivery and a part of the Ministry of Human Settlements. To provide a context for a discussion of the Dagat-Dagatan Project, I would like to sketch a cross-section through NHA as a whole looking particularly at operational issues.

The cross-section or snapshot of NHA was taken about two years ago at a time when the organization was five years old. It realized that it needed to build on the first five years of experience to face a much bigger program during the 1980's. It set about identifying

both the organizational and manpower problems which were likely to be constraints against the Authority's performance, and it sought to find remedies to each of these problems so that a smooth working organization would be created to tackle the massive task facing it.

At the time of this review of its operations, NHA had in place a broad housing program related specifically to meeting the needs of lower income residents throughout the Philippines. The scale of this housing program, is measured in terms of "units." These unit numbers refer variously to the different types of housing benefit being implemented: new dwellings in programs creating completed dwellings in single or multi-story structures; plots or lots in sites and services programs and families in upgrading programs. The current program had in part been shaped by the responsibilities inherited upon the establishment of NHA and in part by specific policy initiatives since that time.

In this discussion, ~~there are three types of units~~ *are described as being in one of three stages:*

1) completed units, being those dwellings, plots or upgraded units in which no further physical development is occurring and which are generally occupied by residents or about to be; 2) units in the development pipeline, i.e. those in construction, in the bid and award process,

in design and documentation, in feasibility and planning, and in the preliminary survey stage; and 3) units where no current action is taking place but which have been identified as a part of the forward program.

At the time of the review, the overall NHA program was made up roughly as follows:

TABLE I

	units	%
a. new dwellings in structures	17,000	9
b. lots in sites and services projects	46,000	25
c. upgrading projects	120,000	66
	<hr/>	<hr/>
total	183,000	100

In terms of their place in the sequence of development, the NHA program was split as follows:

TABLE II

	units	%
a. completed units	35,000	19
b. in construction	16,000	9
c. in pre-construction planning and design stages	75,000	41
d. identified but with no current action taking place	57,000	31
	<hr/>	<hr/>
total	183,000	100

The 90,000 or so units which lie in the "development pipeline" were made up of the following types:

TABLE III

	units	%
a. new dwellings in structure	4,000	3
b. lots and sites and services projects	16,000	18
c. upgrading projects	71,000	79
	<hr/>	<hr/>
total	91,000	100

And finally, in terms of the stages within the development pipeline, the 90,000 units were divided as follows:

TABLE IV

	units	%
a. construction	16,000	17
b. bid and award process	13,000	14
c. design and documentation	21,000	24
d. planning and feasibility studies	22,000	24
e. preliminary planning/survey process	19,000	21
	<hr/>	<hr/>
total	91,000	100

The program target at the time of the review was to move 30,000 units out of this pipeline into the completed

unit category each year, and to move another 30,000 units into the pipeline with a view to achieving the same number of completions in the following year.

The annual budget for achieving that number of completions was of the order of ₱800 to 900 million. Other than for the new complete dwellings in structures, the remaining components of the program are expected to achieve a full recovery of costs through sale and/or lease payments together with capital contributions from the relevant infrastructure and social service agencies. As a measure of the technical staff of NHA that related to this target, the total number of qualified engineers on the NHA staff at the time was 100 and it was recognized that extensive use would need to be made of consultant technical skills in order to achieve the program targets.

Experience at NHA suggested that a project unit would lie in the active zone of the development pipeline (that is from the time when surveys and preliminary planning for the first units are started to the date when a significant number of those units begin to be completed) for a period ranging from two years in the regional cities upgrading projects, up to five years in the more difficult and complex larger scale Manila upgrading projects (e.g. Tondo).

Given this program, there were two important operational objectives for NHA: 1) to keep all the 90,000 units in the development pipeline moving, and 2) to provide the social, economic and management support to the completed projects (and to the upgrading projects in the development pipeline) until local authorities took over the project area. Against those objectives, NHA identified four major operational tasks which would be critical to the achievement of the program during the '80's. These four tasks were:

1. to strengthen middle and senior level staff
2. to provide effective space, equipment and support staff in each program area
3. to achieve and sustain realistic and steady decision schedule and therefore program progress
4. to match the resources and structure of the Authority to the program priorities for the '80's.

Not surprisingly, in a young organization distinct pressures on the middle and senior levels of staff were apparent. In any such organization these pressures stem from the lack of experience of those members of staff or the lack of any staff at all in planned but unfilled slots. In the case of NHA the acceleration of the program from the mid '70's resulted in junior staff with strong performance records being promoted to levels of exceptional responsibility as well as in regular organizational changes

that rearranged reporting lines as the program expanded and priorities changed. A range of concrete remedies that would address strengthening the abilities of middle and senior level staff were identified and have since been pursued. These remedies included:

- a. recruiting new staff directly into senior positions rather than relying exclusively on the promotion or upgrading of existing staff
- b. developing ways of holding onto existing middle level staff by practical, as well as inspirational, incentives
- c. providing senior and middle level staff with a stronger tier of support professional staff
- d. increase the accountability and responsibility of senior and middle level staff by enlarging the spheres of discretion open to them
- e. create a "flying squad" to deal exclusively with crisis and emergency projects to allow project staff to remain available to their specific tasks.

The very practical details of producing a steady flow of plans, engineering documents, studies, meeting agendas, and so on is often impeded by lack of space, equipment and by either too casual or unnecessarily complicated office procedures. Accordingly, a number of improvements were put in hand to be implemented including rationalization of office space, streamlining procurement systems, and increasing the discretion and accountability with the sub-unit for the disbursement of funds needed for day-to-day

operational necessities.

A third major stumbling block in the implementation process seemed to be the uneven and unpredictable pace of decisions in relation to each step in a project's progress. On the one hand, unrealistic undertakings are often made and, when not achieved, result in a loss of credibility and commitment. On the other hand, crisis and emergency requirements can often require a sudden high intensity of work effort resulting in errors, little consultation and fall off of effort immediately thereafter. To answer these problems, NHA proposed to pay more attention to the systems in place that are used to monitor project and program progress and, in particular, to discourage the making or promises of undertakings that are not matched by a reliable statement as to how these undertakings will be achieved.

Finally, the perception given by this review of the major tasks to be achieved throughout the 1980's offered NHA a chance to move its resources into a pattern of organization that would achieve a higher yield from the staff available to it. This has meant a) adjusting the overall balance of staff to enlarge the number and raise the quality of professional and technical skills, b) use the major projects e.g. Tondo, Dagat-Dagatan, specifically

as training grounds for the large numbers of staff that will be needed in a much more diffused and small scale project program later years in the '80's, and c) to sustain the junior professional development program as a way of introducing motivated and capable staff.

Against this background how does the Dagat-Dagatan Project illustrate these operational issues?

The proposed program of sites and services housing at Dagat-Dagatan is intended to benefit a population drawn from three groups: dislocated slum-dwellers from the Tondo Foreshore Project, dislocated slum-dwellers in lower income population from the immediately neighboring municipalities where other public works are taking place, and low income population from Manila as a whole. The project was planning in 1978 to serve the population between the 5th and 60th percentile of the Metro Manila population, based on 10 to 15 percent of household income being devoted to housing costs.

The 410 ha. site is strategically located in Metro Manila and became available as a result of a major land filling operation. It is served by relatively ^{good} urban roads and is accessible to a very great variety and number of job opportunities. Major new regional roads will traverse

and adjoin the site in the future. The nature of the site as a landfill created special problems in relation to drainage, flooding and sewerage, as well as complex requirements for dewatering and foundation stability.

The development plan for the site provides for about one-fifth of the area to be devoted to commercial/industrial land use. The remaining area is devoted to residential use and supporting activities and will contain approximately 20,000 plots, these are expected to house about 200 thousand people. Plot sizes range from 60 square meters to 112 square meters and a range of on-plot service and/or construction options could be provided.

Planning for the project began in 1977 following completion of a small pilot project containing approximately 300 dwellings at one edge of the site. At this time (mid 1982) approximately five thousand lots have been completed and occupied and the remaining fifteen thousand are in the various stages of the development pipeline with total completion imagined some time 1985 or 1986. The project is divided into seven major phases, in each of which a construction target of 200 plots per month is anticipated. Commitment to proceed with the project was achieved in 1978 when construction of major elements of infrastructure began.

Before describing some of the problems being faced in implementation, it is important to mention some of the important achievements of the project today: 1) an expert and accountable project management team about 150 strong has been created and is responsible for the expenditure of 20 to 25 million dollars per annum in construction as well as the estate management of completed areas. The team has provided training opportunities for probably twice this number of staff who have found their way into other parts of the NHA organization and into the private sector. There has been involvement of residents in the planning of areas, the allocation of lots, and in the hand-over process to local authorities of the completed areas. While initial construction targets have not been met, the team has overcome some extraordinary and difficult engineering problems created by the nature of the site and complex logistic problems created by the difficulties in coordinating other government agencies.

Some of the difficulties which have been faced in implementing the project are: 1) the coordination of more than twenty other government agencies in the design, funding and construction of the project infrastructure; 2) staff build-up has been unpredictable and of varied quality; 3) the range of issues to be addressed by the

project manager has required much stronger staff to provide immediate support of the manager's decision process; and, 4) revenue collection has stalled for a variety of reasons, both political and technical in nature.

Slides

DEFINITION OF A MANAGER

Managers are people with responsibilities they have voluntarily accepted, and are known by others to have. These apply often to matters beyond their legal authority, powers, and sometimes even their personal knowledge. They invariably involve others. They are, in fact, owed to others, including clients and members of the public at large, as well as to superiors, associates and subordinates. The moral obligations assumed are usually greater than the powers the manager has to assure compliance--which is why the job is so important, frequently so frustrating, and in the end so personally rewarding. Managers may, or may not, supervise others. They may not even have the right to command. . The relationships they have with others are many, complex, demanding, and as often vexatious. Clearly the manager is a person with a responsibility for seeing that things do (or do not) happen; and is presumed to have sufficient imagination, initiative, and courage to see that this responsibility is fulfilled. The manager who can't stand the heat should as quickly as possible get out of the kitchen--but not, of course, before there are others to take over what needs to be done.

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8. . . .that they usually support what they help to create
9. . . .that a majority is not necessarily a consensus
10. . . .that, in general, they feel comfortable working together (because this is natural to them) and often do their best work in close and friendly association with others (the so-called "group phenomenon").
11. . . .that they value highly the views of their peers, which accounts for the importance of the "group norm"
12. . . .that they are willing to take on risks and responsibilities, so long as they are supported by others
13. . . .that they expect to be treated "fairly", but as they define it
14. . . .that they work best for superiors who also work for them
15. . . .that they like recognition but only when they feel it is deserved
16. . . .that each person likes to think of himself as an individual, and attempts, as a matter of habit, to get some of his own individualism into the way he does his job
17. . . .that they enjoy variety in what they do
18. . . .that men do not work for money alone, but to meet other needs as well; that, as a result, they can neither be "bribed" or "bought" nor can you "sell" them anything either
19. . . .that they resent being embarrassed, humiliated, used, or otherwise manipulated
20. . . .that people possess great latent power when they choose to use it, and this power can be both negative and positive in its implications

The new management theories must provide for these and other elements. Those which fail to do so will fail ultimately in their objectives, despite all that technology can do to sustain them. But those which recognize the importance of values such as the above will have taken the first and most important steps in the proper development and use of their human resources.

July 1, 1979

THE BASICS OF MODERN MANAGEMENT

by

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Over the years, we have begun to discover that many of the ideas, theories, concepts, and assumptions we have held of management are proving not to have achieved what has been claimed for them. Some of these, we find, have failed us completely; others seem to be only half-truths.

Part of the reason for these failures is certainly the fact that the views held--the values lived by--of those at all levels of the organization call for something different from the traditional approaches to managing we have heard so much about. If we have learned anything at all, it is that what was sufficient for another time and place is not adequate for today's needs.

We may not be fully clear what the new management theories will suggest, but we do know some of the requirements they must meet. We know also some of the "people-held" values they must accommodate.

With this in mind, the following listing is presented. It is by no means a closed or complete one. Our needs change as times change. Our views of what is basic, required, good, and wanted change also. The manager of today should, therefore, consider the following as a part of the current cultural heritage of which he is a part:

1. A strong belief in the essential decency and dignity of the individual
 2. The assumption that he has a "vested interest" in his work--in short, a right to his job
 3. Recognition of his desire to contribute to common objectives, to do the "right thing"
 4. Knowledge that people at all levels have many ideas, that they want to contribute them to the common good
 5. Understanding that most people do what seems reasonable to them, but that this is influenced not only by their value systems but also by their feelings and emotions
 6. . . .that they want and need to be informed of matters affecting them, that they do their best work when they know what the organization's objectives are and why
 7. . . .that they want to participate in matters affecting them; that they want to have an opportunity to make their views known
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LOOKING AHEAD: THE MANAGER IN THE YEAR 2000

“The manager’s job will be a much bigger one than it is today”

By **DAVID S. BROWN**, *professor of management, School of Government and Business Administration, George Washington University, Washington, D.C.*

(The role and function of the manager has been evolving in the 35 years since the first issue of PUBLIC POWER appeared in Dec., 1942. What will it be like to manage a local publicly owned electric utility or other organization in the decades ahead? We asked Dr. David S. Brown, professor of management at the George Washington University and course leader for several of the American Public Power Association’s Utility Education Courses, and this is his answer.—The Editors.)

If someone were to ask me what the middle-aged man will be wearing 25 years from now, I would confidently predict that it would be a pants suit with shirt, socks, and also perhaps a tie, and that he would look pretty much as he does now. The suit would probably be made of a mixture of old and new fibers — some yet to be developed, but the style, given differences in cosmetics which include color, width of lapel, cuffs (or not), pockets and vest, would not be greatly different from what has been with us for over 100 years. Warmer — or cooler — perhaps than now and possibly both; and certainly more coffee-, whiskey-, and cigarette-burn-resistant. It will also, of course, cost much more than now, but in basic appearance it will not have changed too greatly.

So it will be, I predict, with the manager. In general, in the year 2000, he will look very much as he does today and will do many of the same things. As long as there are organizations, there will be organizational problems and there will need to be managers to resolve them. As the late Paul Appleby, himself both a scholar and an administrator, was fond of remarking, “It is the manager’s job to make a mesh out of things.” There should be ample opportunities in the decades ahead to test this proposition.

In fact, the managerial role should grow in importance. The differences between what he will be doing then as against what he is being asked to do now will reflect the differences between the nature of society then and today. To understand what these are, we will need to appreciate some of the funny things that are happening to us on our way to the Twenty-first Century.

■ **Looking into the future**

There can be no serious prediction of the future that is not a projection of past and present performance. Man is gifted with hindsight, not foresight. To suggest

what the future will contain, he must understand what has gone before and, indeed, what is happening now, and be able to project the trends thus observed towards some future target date. This is, of course, neither as simple nor as easy as divine revelation, but given the infrequency with which divinity reveals itself, it is probably a good bit more dependable.

My own approach is to do as the weather forecasters do: to note what is moving our way, what it will encounter en route, when it will arrive, and what, based on past experience, all this will produce. On its face, this is reasonable enough. The problem is that society contains both forces and counterforces in substantial numbers. Any one of these, in fact, is potentially able, like a line squall or unexpected low, to dominate the whole. Still, the effort must be undertaken. Man’s greatness lies in trying to foresee and overcome the problems he will face.

The manager of the future and what he does will be determined in large part by the organizations he serves. And these, in turn, will be shaped by client groups and publics, by the kinds of demands they make upon him and by the nature and expectations of those with whom he works. Let us examine these in some of their specifics.

■ **People and their demands**

Organizations are formed to meet needs. People demand goods, services, comfort and protection. The list seems always to be both an endless and a growing one.

But before we conclude that this is so, let us reflect a moment on some of the things that are already happening to us. The past decade, if it taught us nothing else, has reminded us that there is a limit to what we can ask for and reasonably expect to get. That limit is controlled by the resources we have available or are willing to commit to it. We have already discovered, for example, that we are short of energy, or more specifically, energy in the forms we most

want. We know also that we suffer acute shortages in time and money and such other things as water, good weather, clean air and living space. We have shortages in housing, lumber, coffee and much else. We need more doctors, engineers, social workers, parameds, craftsmen, fruit harvesters and household workers. Good managers are also in short supply.

We are learning, slowly to be sure, to reduce or limit some of our demands. The housewife whose husband's income should have assured her of the availability of a cleaning woman has had to relearn the doing of her own housework. We no longer expect mail deliveries to be up to what they were 25 years ago, despite a 500% increase in first class postage. We have become accustomed to the fact that doctors will not make house calls anymore, and as we grow richer as a nation, we are moving towards smaller cars because they consume less gas. We may have reached the moon but "really fresh" eggs and fresh-fresh vegetables are likely to be beyond our reach.

We do not expect those who hold us up to be sent to prison because we know that most of them won't even be caught. We have learned to live with long delays in the arrival of the service man and the delivery truck. As clients, we accept the fact that the doctrine of the customer being always right is passe. We expect more and more of computers but one thing we don't expect of them is that they can ever be programmed to correct their own mistakes. When these occur, we know what it takes to set them right.

I make these points to suggest that the future, whatever breakthroughs there may be, will not be one of unlimited largesse. Far from it. The lessons of the past are that we must be more selective in our requirements. We are already learning to re-think some of our "needs."

The manager in the year 2000 will be faced with the fact — which, if one thinks about it, is already occurring — that his role is increasingly becoming one of ascertaining what our real resource capability is, of protecting the future against future requirements, of making hard decisions concerning them, and of negotiating among those whose demands conflict with one another.

The manager in the years ahead will be less a producer than he has traditionally been and more of an innovator, a developer, a negotiator, an arbitrator and a conservator. He and his associates must be able to deal with a variety of problems in a highly complex society

Managing 25 years from now

The manager 25 years from now will need to emphasize certain skills and capabilities at the expense of others to cope with the changes that have taken place between 1977 and the year 2000. Here are some of them.

- He will need to have greater understanding of how and why things happen as they do. He will need a greater appreciation than managers have today of the importance of systems and their interrelationships.
- He must learn to deal with complexity in its many forms, and with a constantly changing complexity at that. He will live among new and startling equipments and must find ways not to be dominated by them.
- He will need to be increasingly "people oriented." In particular, he must be able to negotiate in a constructive way with all of those, both inside and outside, who have a hand in the achievement of organizational objectives.
- He must learn new ways of leadership. To be successful in this face-to-face situation is not enough. He can no longer rely on traditional forms of authority. He must understand the difference between being "in charge" and being in control.
- He must be more innovational and creative in all their meanings than his counterpart is today. Innovation, Peter Drucker reminds us, is becoming the "very heart and core of management."
- At the same time, he must concern himself with the proper use of limited resources. Indeed, these limitations and the increase in the demand for them may well be one of the most difficult problems of his stewardship.
- Development both for himself and his associates will have become a continuing process. He will need to find new ways by which he and they can become prepared for what will be required of them. □

which are frustrating, pervasive and essentially unresolvable. As E. B. White has put it: "What with the tendency of one thing to lead to another, I predict a bright future for complexity." It has already arrived.

No longer is the manager someone whose primary job is to "get the work out." Rather, he will be expected to determine how limited resources (energy, for example) are to be made less limited and also how they can equitably be shared. One of the problems with not having enough is that what is available becomes the more sought after by many.

How is one, for example, to divide between rich and poor? Between the wasters and the conservers? Between industrial and residential users? Between those who are "old customers" and those who are new ones. Between those bent on achieving personal goals and those who would serve the community? It is not enough to cite national goals or organizational policies. It is the individual manager who must help to determine and administer them. This becomes one of his primary responsibilities.

All of this is far cry from the "push button" world so many crystal gazers have seen for us. There will be new ma-

chines, of course — more computers, more word processing equipment, more "instant communication," more automation. But I do not see them dominating us. Increasingly, I believe, they will emphasize the integrative aspects of the manager's job and make him even more vital to their use than he is now.

■ The changing organization

Organizations reflect not only the requirements laid upon them but also their times. They are far from static. They may change slowly (as men's outfits change slowly), but they do change.

Among the more important changes in organizations today is that they are becoming more fluid and more flexible. This may not be at once apparent, but over a decade or two I believe it can easily be observed. There will be a greater interchangeability of parts and also of personnel between institutions. Organizational leaders already are speaking less positively of "company loyalty." There is a lessening of authoritarianism. Those who work with organizations have noted the shared loyalty which members feel for other institutions and objectives. Traditional marketplace enemies may still be

enemies (as the law seems to require), but they have begun to accept each other and even on occasion to work together in this over-crowded world of ours. A division of the market becomes not only reasonable but proper.

All of this may not greatly alter the formal appearance of the organization, but it does change its characteristics. Divisional lines are becoming less sacrosanct as matrix organizational structures are tested and affirmed. The importance of staff, as against line (or operations), has at long last been recognized. There has been an erosion of time-worn shibboleths. Harlan Cleveland, author of "The Future Executive," sees an expanding span of supervision, a lessening of hierarchy, and a greater accessibility of the executive to both internals and externals. "The future," he suggests, "is horizontal." The temporary organization (Toffler calls it "ad-hocism") is proving its usefulness as new arrangements are devised within the parent structure to meet new demands.

We are no longer as committed to bigness, or conventional forms of bigness, as we once were. The doubts we have long held about public bureaucracies now include private bureaucracies as well. And for good reason. Just because a company or an agency is big doesn't mean that it is either efficient or economical, and it certainly doesn't assure us that it will be well behaved. The celebrated English economist, the late E. F. Schumacher, has pointed out in his landmark book, "Small is Beautiful," that the advantages of littleness are substantial. Smallness, he felt, is being born again.

Bigness, of course, will not disappear overnight, nor do we want it to. What seems more likely is that the organization of the future will combine bigness with smallness. This is not as ridiculous as it may sound. It suggests a confederational approach, a network, a system or some similar arrangement into which smaller units can be plugged in (or out) as the situation may require. The franchise system, made famous by McDonald's, has provided us with an example of a way in which local capital and initiative can be involved in a national network. McDonald's and those who have emulated it are both big businesses and many little ones. We may not yet be able to apply this to auto-making but the good word from Detroit is that General Motors is already attempting new work designs, along with the mini-Cadillac, which are likely to be part of the future. (Can Ford be far behind?)

Changes in form suggest changes in behavior. Not only is the network (or system) substantially different from the family business with its autocratic controls (or even, for that matter, the traditional stock corporation), but there are changes also in how these systems function. No longer is the manager the "bull of the woods" with life or death power over his subordinates. Rather he has become, as the supermarket manager has shown us, someone who "keeps things going." He greets customers or helps them locate hard-to-find items, he initials checks (if an assistant is not available to do it), he watches for shoplifters, and he may even check groceries or bag them if lines have formed and customers are not being served. A generation of management advisors who have held that the manager's job should be limited to managing is already revising its catechism.

■ *The changing individual*

Collectively and individually, the work force is changing also. Collectively, there are, and will be, more women in it, more blacks, more persons of Spanish and other minority group descent, and probably in the years ahead, a larger percentage of old people as well. Along the way, people are becoming more highly educated, more professional, and, correspondingly, more demanding.

More than a third of those in gainful employment today are women, and more than 40% of all women are gainfully employed outside the home. (Married women who work are now at 52.4%.) With an increase in child care centers, the number and percentage are sure to increase. The effect on management is inescapable. While women may ask for the same rights as men, they won't permit themselves to be treated in the same ways.

Blacks have long since learned that they are the last to be hired and the first to be fired. They and their leaders are taking legal steps to insure themselves that this pattern is revised. It will be. Many of them, backed by EEO legislation and court decisions, have assumed new patterns of belligerence. They are supported in these attitudes by the — "hyphenated Americans" who have suffered with them in the hiring halls and personnel offices of the past.

Not only are there changes in the makeup of the work force, but there are also changes in worker attitude towards work and the work environment. The American, always individualistic, is becoming even more so. He is proud, fiercely independent and self-reliant but

increasingly aware of the requirements of inter-dependence, and eager to make good both sides of his heritage.

There is a general feeling of resentment by the blue collar worker over status and benefits. Both the number and percentage of the blues have fallen during the past two decades, and white collar workers are now clearly in the majority although many of them are paid less than blue collars. The blues have in part assuaged their injured feelings by asking for more pay and increased benefits and, recently, a greater voice in the running of things. In several European countries, for example, they have won places on boards of directors, and it — or more likely some American adaptation of the same — may happen here. We joke of the janitors who call themselves stationary engineers, of the garbage collectors who have become sanitation specialists, and the tree trimmers who are now arboreal experts. The message, however, is clear. No one wants to be on the bottom rung of the occupational ladder, and the adjustment in terminology is an effort to remedy the situation.

As the Department of Health, Education and Welfare task force report on "Work in America" (O'Toole Report, 1973) makes clear:

What the workers want most, as more than 100 studies in the past 20 years show, is to become masters of their immediate environments and to feel that their work and they themselves are important — the twin ingredients of self esteem.

The educational level of workers is rising also. Over 80% of those between 20 and 29 are high school graduates with a steadily increasing number going on to college and later to graduate school. Currently there are a record 8-million-plus in colleges and universities, still a growth industry, with larger numbers and larger percentages sure to come. The college-trained man and woman, as the manager of the future is sure to discover, cannot be managed by organizational patterns devised by either Frederick, Frederick, the Great, or F. W. Taylor, the American engineer.

Even more than his blue-collared associate, the professional insists on rights and prerogatives and is in a position to get them.

The O'Toole Report goes on to say:

Workers recognize that some of the dirty jobs can be transformed only into the merely tolerable, but the most oppressive features of work are felt to be avoidable: constant supervision and coercion, lack of variety, monotony, meaningless tasks, and isolation. An increasing number of workers want

more autonomy in tackling their tasks, greater opportunity for increasing their skills, rewards that are directly connected to the intrinsic aspects of work, and greater participation in the design of the work and the formulation of their tasks.

Workers for years have been tied to one job and one company by pension systems, by lack of information concerning prospects elsewhere, by their own lack of training, by custom and habit, and by the uncertainties of moving into new areas. They have thus been forced to accept whatever terms their employer has insisted upon. They are now finding increasing freedom to do their own thing.

Nationwide retirement systems make it easy for a man to pull up stakes in, say, Huron, S.D., and move to Biloxi, Miss., or vice versa. Indeed, there is the likelihood that Congress will make it easier still. Workmen, in fact, can look forward to the day when they can take their retirement equities, as they do their tool kits, with them wherever they go. Thanks to the instant communication via TV, we already are informed of what goes on in Biloxi or Bloomington or Bakersfield — or for that matter, Baghdad. World War II taught us about moving, and we move on the average every four years or so which makes the moving companies another growth industry. The American is mobile as well as flexible: it is part of his present and future life style.

We also are changing types of work at a remarkable rate. We move from one job to another for a variety of reasons: because there are new needs and requirements; because old jobs have become obsolete; because new jobs offer new opportunities and new "challenges"; and because we enjoy the new experiences which different assignments bring. The average 21-year-old will be in six to eight major lines of work in his lifetime. The manager must constantly be prepared to train new people — and also old people in new things. Indeed, training is becoming one of his most important assignments.

All this is leading to changes in the work ethic. A new generation has raised serious questions concerning the values it has inherited. A view frequently heard among younger workers is that they have no intention of working as hard as their elders have worked. And they probably won't.

Work, in fact, is seen in a variety of ways, depending upon those who are looking at it. There are those who regard it as a major life objective. (Happily for the manager, their

numbers are large.) But others see it only as a means to some other end and still others as a burden upon them which is to be dealt with as lightly as possible. Many, who come from the ghettos, have little or no feeling for it at all.

Americans have become increasingly selective in terms of the things they will and won't do, which, of course, adds to the manager's problems. With workers being always ready to say what they think about both their supervisors and the work system, and the strident and critical always being more newsworthy than the routine, the manager of the future can expect to hear many things he would prefer not to have heard.

■ *Enter the future manager*

These are some of the forces that are changing the managerial role. They are already apparent. There can be no doubt that the manager of the future will have to deal with them — and probably with less power and personal authority than his counterpart has today. Ours is a democratic society which shows increasing intolerance in both public and private institutions of autocratic behavior.

Roy Ash, a former director of the Office of Management and Budget and before and after that a major corporation president, has summarized for us what he thinks the future manager will be required to be and do.

The manager of the future will need to be aware of and involved in the total environment in which he operates. He will need to perceive and understand the new value systems of that environment and, even more important, to share most of them. He will be emotionally and intellectually oriented to the opportunities and challenges of the future, finding excitement, release and fulfillment . . . grappling with them. He will deliberately venture beyond the known and proven, knowing that the ultimate security of avoiding business risk is to be out of business. . .

He will exercise leadership through example, inquiry and analysis, thus improving the quality of analytical thought throughout the organization. He will challenge his own judgments as relentlessly as those of his subordinates. He will insist on thorough fact-gathering and vigorous analysis, but will heed, and often obey, the voice of intuition based on experience.

Such words, of course, are not greatly different from what a retiring manager today might say to his successor. Their significance, however, lies in the changes which will have taken place between 1977 and, say, 2000. Though the changes may occur incrementally, they are likely in bulk to be profound.

In summary, the manager's job in the next century will be a much bigger one than it is today. "Management is, all things considered," as Jean-Jacques Servan-Schreiber, the French observer and critic, has pointed out, "the most creative of all arts. It is the art of arts, because it is the organizer of talent."

The manager will need all the creativity he can muster and all the help he can get. His resources are, in fact, likely to be more limited than are those of his prototype today and his powers more circumscribed. Those who make demands upon him will be more positive in their requirements and their voices are likely to be more shrill. Those who work with him, both internals and externals, will undoubtedly have a larger voice in what is done.

The manager's reward, we may hope, will be a better appreciation by his fellow citizens of his contribution to both his own and their comfort and survival. If past experience is any guide, however, he should not count on it. □

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QUALITATIVE RESEARCH

1. Knowing and acting depend on each other.

"Background information" stays in the background. It is sometimes useful to collect, but not to shape program design: rather, to show that there is a research staff and that it is keeping busy. If we want to collect information which is to be used in shaping policy or in designing programs, we must take a strategic approach. This means that we must collect the kinds of information which is truly relevant to the kinds of choices which have to be made in policy and program design. Not only the topics we investigate, but the research strategy we follow to investigate these topics, depends on programmatic purpose.

We must think of research as a process of selection and organization. The world out there is complex and diverse beyond the power of any set of categories or generalizations to capture it all; we need categories and generalizations which capture those aspects of it which we need to deal with if we want to accomplish the purposes at hand. This means that at different times the appropriate categories and modes of generalization will differ.

2. Housing programs in LDC's are changing in ways which imply a different research strategy from that now dominating planning and housing agencies.

For a substantial period of time, the typical government housing programs of the LDC's centered around the production of houses. A "project" was a given number of dwellings, located on a specific site, and furnished with the appropriate infrastructure -- water lines, sewers, roads, electric lines.

Under these circumstances, it seemed natural for housing research to center around the concept of dwelling units, and the basic mode of

information processing to be counting. Housing programs were programs to build multiples of some standardized building; abstracting this way of working into the realm of ideas led to calculating dwelling units required, counting dwelling units produced, and describing necessary action in terms of the housing deficit, calculated as the difference between the two totals. (Calculations of housing deficit, it turns out, entered into policy only obliquely, since rare or nonexistent was the government prepared to "fill the gap" -- i.e. construct houses in numbers which were other than token compared to the calculations; nevertheless, the calculations served to legitimize government efforts and were thus indispensable to operations.) At the more programmatic level, there were calculations as to cost and of "affordability" by the "target populations." The language is revealing; the "units" were to be "delivered" from on high, like so many bombs.

Of course, the building of "dwelling units" still plays an important role in the housing policies of governments. But in recent years a number of programmatic ideas of a different character have come to hold respectable standing in the world of housing policy analysis and program. The international agencies -- United Nations and World Bank -- have been especially active in pushing the "new approaches." The programmatic ideas are various, but they have in common a shifting of focus from the programming of groups of complete "dwelling units," with the understanding that government will execute the project from ground-breaking to rent-up, to a conception of limited government interventions into processes of housing production in which a very substantial role is played by private individuals.

One factor was that intellectuals concerned with the problems of the rapidly-growing cities of the developing world began to argue against the

demolition of shantytowns. The idea that favelas and barrios were "unsightly slums," "creeping cancers"¹ on the cities was rejected: rather they were interpreted as "slums of hope"², communities in formation (or as the Peruvians eventually re-titled theirs, "young towns"), as "not the problem but the solution"³ to the problem of low-income housing in the rapidly-urbanizing Third World.

By treating shanties not as substandard dwellings, but as dwellings-in-process, this re-interpretation at once called into question all the old calculations of the housing deficit. "The arithmetical approach starts by establishing an unrealistic minimum standard for housing. This standard then creates a severe housing shortage because most of the existing kinds of low-income housing do not meet this standard. The arithmetical way to overcome this housing shortage is to construct new housing units in sufficient numbers...."

"Simple as it sounds, this approach tends to obscure the more fundamental issues that make housing problems so impossible to solve....It relies too much on the government's limited resources, to the extent of obscuring society's actual resources, by establishing too high a standard of housing -- one which illegitimizes most, if not all, of the existing low-income housing stock."

The authors of this statement go on to show where, in fact, people were living in Bangkok. "Everybody in this city is housed in one way or another, and there are no people sleeping in the streets." They go on to generalize this observation in terms of a "complex low-income housing delivery systemThe majority of its components rely little on planners, engineers and other professionals, receive little attention from government housing agencies."⁴

A moment's reflection will suggest why no government could readily take over this mode of analysis directly as a basis for policy. To announce, at one extreme, that the housing problem does not exist -- after all, even the pavement dwellers have their accustomed locations -- would certainly appear excessively callous. To take the other extreme, and announce a government responsibility for the total operations of the real estate market would be far too radical for most.

But a more positive view of popular efforts in the field of housing, and a recognition that government cannot, after all, do everything, did come to be incorporated into thinking about housing policy and in one version or another of more interactive kinds of housing programs.

3. Programmatic Issues

A. For many years, there have been attempts to lower the cost of housing by having the future owners contribute their labor through various kinds of guided self-help programs. These have not always worked out as well as hoped, but the very problems of the approach have forced an attention to the economics of popular housing, including an attention to such factors as opportunity costs.

B. Core dwellings and serviced sites have been recently the recommended solution for lowering costs to a level which could serve lower income groups. These programs clearly depend on the willingness and capacity of users to invest their own resources to complete the project. Cases where the complementary investments have not been forthcoming -- and equally, the cases, in which investment has been at a much higher level than that expected -- have again made it clear that government is intervening rather than programming the housing output.

C. Coupling the continuing problem of costs and standards with the continued appearance of irregular, unplanned low income settlements, agencies came to put emphasis on the value of "upgrading projects" in existing settlements. At this point, it begins to become clearly apparent that government action is not so much a "project" as an intervention into a housing system in which many of most of the major actors are non-governmental.

D. Another kind of event which has forced us to enlarge our understanding is the recurrent phenomenon of government projects which have failed to develop in the way they were programmed. The most conspicuous examples are government projects in certain countries which have remained unused or been under-utilized. An empty or near empty project is an embarrassingly conspicuous example of a failure to look at a proposed governmental intervention in its whole market context. But there are examples as well of projects which have fallen into deterioration, through failure to attract residents who would be committed to their upkeep, and there are the reverse instances of projects which have been taken up by higher income people than those for whom they were programmed. Finally, there are instances of projects which have been drastically altered and rebuilt by their residents.

E. Another phenomenon which has attracted attention is the substantial existence, alongside government urban programs, of very large informal housing markets. For example, despite the extraordinary efforts of the Egyptian Ministry of Housing, it now appears that seventy percent of additions to the Egyptian housing stock have been produced by the private/informal sector. Other LDC's present similar situations. To provide the structure of incentives and regulations which can derive maximum social benefit from all this non-governmental activity, we need to understand its functioning.

F. A final issue which contributes to our broader understanding of housing and urban policy is that of the management of the already-built ties. While the management of new development is always an attractive focus for policy, the call to deal with problems in the already-built cities have made it evident that there can be no net gain if we allow housing and services to deteriorate in the existing stock. There are issues around management and maintenance of the existing cities.

4. Housing as a Process: Invisible Structures

One way of thinking about the informational requirements suggested by these issues is to say that they require us to conceive of housing as a process. It is a process in which various individuals and institutions continually invest or disinvest, maintain or fail to maintain. The focus is not so much on the housing stock, as on the flows of resources which continuously produce it.

Housing seen "as a verb," as Turner would have it⁵, consists of people doing things. It is people building walls, clearing ditches, breaking windows, putting up graffiti, remodelling their kitchens. It is also people setting interest rates, enforcing contracts, putting in sewer lines and paving streets.

Another way of thinking about the informational requirements of the newer approaches to housing is to consider that we need to understand the invisible structures which govern the flow of resources into and out of housing and control the way in which people and institutionalized groups use the housing which is produced. These invisible structures are in part legal and official: urban development plans, the rules of legal tenure, building codes, and the like. In part, they are constituted by unofficial and sometimes quite unformalized arrangements, such as the organization of building materials suppliers, labor unions, neighborhood organizations.

5. The need for qualitative data

Information about processes and about the invisible structures is not readily derived from counting things. Of course, we will always need to count things; when we know what to look out for we need to find indicators which enable us, by counting, to know how prevalent a phenomenon is, and we will need to have measures of output and measures of inputs. But counting is not very useful when we need to get a picture of the way the world works, of the linkages between phenomena.

Planners often fail to recognize that at bottom they depend on stories of how the world works. They need not notice their dependence on stories of how the world works because they take them for granted -- until for some reason events prove them wrong, as when it turns out that people enlarge their core house not to make a larger family residence, but so as to rent the rooms to others. To understand the processes of housing and the invisible structures which shape those processes we need stories which correctly represent the world out there into which housing programs intervene. We need, in other words, correct stories about process, about connections, and about the working rules of the housing system or real estate market.

6. How to Do It

The way to get such stories is to ask knowledgeable people, that is to say, people who are involved in the processes, who either make or are subject to the rules or 'invisible structures' which you want to comprehend. This means that in this kind of research, we deal not with "subjects" or "respondents" but with informants. The interviewer is asking people to tell us about the way things work. They probably will find it most appropriate to tell about what has happened or is happening to them as a way of explaining how things work. Thus this kind of research centers around .

collecting stories of people's experience.

For example, if we want to understand how a sites-and-services project is working out, a qualitative researcher will ask people involved in the project how they came to hear about it, why they decided to get involved, what the difficulties have been, what the alternative courses of action would have been for them. This contrasts with (although should not of course preclude) such alternative research strategies as: collecting data on the social characteristics of participants, and on the rate of building in the project, or surveying participants as to their opinions of the program. In the kind of qualitative research I am proposing, we will collect social data and opinions, but as it were, by the way; we are most interested in stories. The interviewer directs the interview towards the themes of interest, but he or she lets the informant tell the story in his or her own way, and to bring up what he or she sees as relevant to the general issue. The interviewer tries to record what was said -- it need not be word for word, but as much as possible in the same general order and emphases.

The process of analysis looks absurdly simple. The researcher takes a set of interviews on a topic and reads them through several times, identifying the major themes, and marking on the margins of the typed -- interviews where material relevant to these themes appears. The researcher then takes a set of marked interviews, cuts them up according to themes, arranges the pieces in thematic piles, and writes up a report summarizing, with some quotations, what people had to say about this or that.

The result should be a research report which in some ways resembles good journalism more than it does the traditional report of survey results. It should be problem-focused and interesting to read -- not a minor consideration, when one considers the issue of use by policy-makers.

Inevitably, those who present such a report will be asked something like: How do we know these people are typical? Thus, it is important to be clear as to the logic of credibility and of generalization animating this research process. "Typicality" isn't the issue. Remember, these are informants, not respondents, not a sample. The particular experience, the special stories of the informants tell us about how the system works because we know where the informants are placed in the system and their experience of it. We generalize from the particular in much the same way that the historian takes the story of a very particular individual as a way of understanding the politics or social history of his time. And in the same way that the historian, according to Barbara Tuchman, uses "corroborative detail" to make historical accounts vivid and believable, it is the richness and imageability of the stories which in the end makes these qualitative stories credible. We then move to generalize as to the approximate frequency of experiences like those of our informants by using other data, quantitative data, to estimate how many people are likely to find themselves in the same or similar positions as those people we have interviewed.

7. What Qualitative Research is Good For

Qualitative research is particularly useful for understanding issues in which processes and connections are important: institutions, sub-markets, programs. Some examples of such issues follow.

How programs work

Every time we try to evaluate public programs we re-discover the simple but often forgotten fact that between the program design and the outcome there intervenes a complicated history of institutional evolution; it is silly to evaluate the result of the program by looking at its outcome when we don't know what the program really was in practice. About the only way to find this out is by interviewing people involved. A "self-help" building

program, a public housing program, an upgrading program are examples of enterprises which we would like to look at in this way.

Housing markets

The work of Anthony Leeds,⁶ Shlomo Angel,⁷ and Tomasz Sudra⁸ has given us examples of how qualitative research can be used to understand low-income housing markets. All of these researchers have thought of the city as presenting a set of diverse but inter-linked sub-markets of housing, structured by both economic and political forces, within which low-income people move. In part, the sub-markets are physically differentiated and visible to inspection -- central-city slums, shantytowns, rooming-houses and the like. But who they serve, how they are controlled, what forces their owners respond to, is probably most easily discovered by interviews.

Industry studies

The easiest way to understand how an industry works -- the market in which it operates, the kinds of people who are active in it, the interconnections between firms, the difficulties of its operation, its connection to the political process -- is through qualitative interviewing. We are just beginning, I think, to understand the usefulness of this approach in the field of low income housing. We are beginning to get studies of the low-income irregular urbanization business,⁹ as well as the management of squatting. We need studies of the small builders who, we now know, do most of the actual work in what planners used to think of as "self-help." (Praful Soni, studying "self-help" in Nairobi found that people in a sites and services project did not need technical help in building, so much as technical help in picking a reliable petty contractor.)¹⁰

How Cities Work

Madhu Sarin's study of the "informal sector" in Chandigarh¹¹ is developed out of a very strategic use of interview "stories" of the kind discussed here, and succeeds splendidly in showing the relationship between physical plan and economic functioning. For an example of the usefulness of this kind of work I especially recommend the interview story of an illegal ("squatted") market, exposing quite elegantly both the locational factors in small-scale vending and the politics of commercial site allocation in the city.

8. Advantages and Difficulties of Qualitative Research

Qualitative research of the kind discussed here is extraordinarily cheap, compared to survey work. It also can be done very fast; if there are researchers ready to work, they can go out and get information on some policy issue in time for the next staff meeting. It is a way of researching which can also be targeted directly on the questions of interest to policy makers or program-managers; the output may well not be so much a research report, as a program memorandum.

On the other hand, it has problems, and these are not negligible ones.

In the first place, it looks fuzzy, personalistic, and non-authoritative. There are many biases and preconceptions built into surveys, but they are incorporated into the original categories and the way the questions are asked; what comes out at the end may be waved at a meeting as facts.

It is not easy to find the right people to do qualitative research. It is relatively easy to train students or social workers to carry out a survey; it is much harder to train people to do work which involves as much interviewer initiative as do qualitative interviews. The interviews not only take more skill and energy input to do; they are many times more

laborious to record. (Tape-recording does not solve this problem, but merely defers it to the stage where the interviews are transcribed and analyzed.)

Finally, this kind of work may produce political problems which cause the whole enterprise to self-destruct at a fairly early stage. This is especially true when the work focuses on the monitoring or evaluation of programs: Consider the situation. The person doing the interviewing must be someone without much power or importance in the organization -- otherwise, they will not be either willing or able to do the work. But this person will be collecting stories which deal with problems with the program from the point of view of its clientele. It is said that in ancient times the bearer of bad news might be killed; we do not do that nowadays, but we often fire the bearer of bad news, and in addition, may well terminate the research program which generated the bad news. Thus the very success of qualitative studies in bringing in new and relevant information may cause the program to have a very short half-life.

FOOTNOTES

1. For one example, Juppenlatz, M., Cities in Transformation: The Urban Squatter Problem in the Developing World. St. Lucia, Queensland, University of Queensland Press, 1970.
2. Stokes, C.J., "A theory of slums," Land Economics, 38:3 (1962), 187-197.
3. Mangin, W., "Latin American squatter settlements: a problem and a solution," Latin American Research Review, 2:3 (1967), 65-98.

Turner, J.C., "Barriers and channels for housing development in modernizing countries," American Institute of Planners Journal, 33:3, 167-181.
4. Angel, S.; Stan, B.; DeGoede, K.H., "The low-income housing system in Bangkok," Ekistics, 44:261, 78-84.
5. Turner, J.C., Freedom to Build: Dweller Control of the Housing Process, New York, Macmillan: 1972.
6. Leeds, A., "Housing settlement types, arrangements for living, proletarianization and the social structure of the city," Latin American Urban Research, Vol 4 (1974), 67-99.
7. Angel, S., et al, op. cit.
8. Sudra, T., "Housing as a support system: a case study of Mexico City," Architectural Design, Vol. 46:4, 222-26.
9. Doebele, W. A., "The private market and low income urbanization: the 'pirate' subdivisions of Bogota," American Journal of Comparative Law, Vol. 25:3, 513-64.
10. Gilbert, A., "Pirates and invaders: Land acquisition in urban Colombia and Venezuela," World Development, Vol. 7 (1981).
11. Sarin, M., Planning and the Urban Poor: The Chandigarh Experience 1951-1975, Development Planning Unit, University College London (mimeo), 1975.



HOUSING AND CONSTRUCTION CREDIT IN PORTUGAL

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TRANSLATION

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1 Dollar ≈ 90\$00
100 Dollars ≈ 9 contos

I - FOREWORD

The portuguese banking system acts in the housing and constructions financing through suitable rules, which brief description is the chief aim of this article. However, we would like to begin with a small introductory note characterizing the sectors of activity - Housing and Construction - inserting the referred financing function in Portugal.

Housing Sector

The habitational lacks in the country have become worse for the last years, as a result of the conjunction of the following factors:

- Aging of the housing park;
- Domestic migration of the populations, mainly those from the rural interland, to the industrial and urban attraction poles;
- Decrease of the traditional emigration, what became worse with the flow of displaced people returning from the ex-colonies, mainly as from 1975;
- Fall in the production of dwelling-houses since 1974, in pursuance of the deep changes that took place at that time, in the political-institutional model in force, with a special reference to the almost complete extinction of the market of new dwellings for renting.

The available studies resulting from the preliminary countings of the 1981 census, prepared by the concerned Official Entities, point towards the increase of the dwelling deficit, in absolute terms, taken by municipality, for the period 1970/81, which went over from about 35.000 units to approximately 52.000 units, respectively in the beginning and in the end of the stated period.

.../...

The counting held, however, presents considerably lower than the estimates effect^{ed} during the period under review, since there is ^{an} appreciable disagreement between the number of dwellings constructed from 1970 to 1981 (calculated in about 400.000 dwellings) and the results attained up to now, on the basis of the 1981 census, where are registered about further 673.000 new dwellings.

As far as we can see, the explanation for the disparity verified between the aforesaid numbers is due to the strong development of the illegal construction phenomenon occurred in the last years, although its existence is well known in the Country, as to its heavy consequences on the correct urbanistic planning, among others, what is omitted in the statistics of the dwellings concluded, where only the duly licensed dwellings are allowed.

Likewise, the qualitative lacks registered in Portugal have showed impressive as to the aptency of the housing park to assure efficiently the needs of lodging of the portuguese population.

Under the ciscumstances, it has been admitted that the families living in precarious lodging conditions, including the situations of sublease and overcrowding, reached already in 1970, a total of 650.000 units, although it is still admitted that this became significantly worse in the last few years.

Civil Construction and Public Works Sector

Similarly, we may point out the following prevailing aspects characterizing the civil construction industry in Portugal:

- The gross added value of the sector is equivalent to, approximately 6% of the G.D.P. f.c. and about 50% of the value of the achieved works;
- Generally speaking, the construction contributed more than 60% for the total value of the gross formation of fixed capital in the country, and the housing

.../...

construction has still a specially significant position, that amounts to about 30% of the value reached by the gross formation of fixed capital, originated in the construction in general;

- Atomistic structure of the enterprises, with a high concentration - about 90% - of the enterprises, which staff does not exceed 9 workers. The number of enterprises in the sector under the juridical form of society, is still very small (about 6%);
- Highly intensive work nature of the sector, absorbing around 8% of the active population, with a high preponderance of non-skilled workers;
- Considerable descapitalization, with a significant rupture of the enterprises financial autonomy, verified mainly in the last years;
- Insufficient indices of productivity average, in view of the european competitive market, although they are partly compensated by the low level of wages paid in the country.

II - MAIN FINANCING AGENTS OF HOUSING AND CONSTRUCTION

The Role of the Public Sector

On the level of the Central Government, the conduct of the urbanistic and habitational policy in the last years has belonged basically to some entities depending on the (Housing and Public Works Ministry - *Ministério da Habitação e Obras Públicas*) *where we should point out the (General Administrations of Urbanistic Planning - *Direcções Gerais do Planeamento Urbanístico*); (of the Regional and Urban Equipment - *do Equipamento Regional e Urbano*); (of the Basic Improvement - *do Saneamento Básico*); and specially the (Housing Promotion Fund - *Fundo de Fomento da Habitação*)

* In the present government organization denominated Housing, Public Works, Transports and Communications Ministry.

On the level of the Local Government, stands out the action in charge of the local municipalities, which at present, owing to the widening verified in their financial autonomy, coming from the new law of the Local Finance, entitles the municipalities to a strengthened financial capacity, with assured revenue in relation to the overall amounts of the taxes collected by the state, registered in its General Budget, which becomes financial means, most susceptible of being applied in the performance of urbanization and housing construction programs, in the areas of the relative jurisdiction.

However, up to the present and as from 1969, on the level of the Central Government, in its own statutory scope, the Fundo de Fomento da Habitação (F.F.H.) was entitled to the introduction, planning and technical-financial support of the main housing programs established by the State, which on the whole, points towards a market share (number of dwellings constructed), that have always showed to be lower than 15% of the total of dwellings constructed yearly in the Country, as we may see on the following Table:

TABLE I

New Dwellings Constructed by Investor Entity

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Public Sector	3.424	4.683	4.557	2.223	2.166	1.889	5.794	4.114	4.933	5.640	6.000
Private Sector	31.885	34.847	36.759	40.357	29.006	27.325	28.035	28.935	30.116	31.171	33.000
Total	35.309	39.530	41.316	42.580	31.172	29.214	33.829	33.049	35.049	36.811	39.000

* Includes the promotion dwellings of the cooperative societies.

Sources: MHOPT - Planning Office

The main Investment Programs established, on the level of the F.F.H., are distributed as follows:

.../...

Direct Promotion of Housing: This is an initiative that returns to the establishment of the F.F.H. (1969) and seeks essentially:

- Purchase and urbanization of lands for construction;
- Promotion of ^{the} construction of dwelling houses and relative support equipment, taking into consideration the areas and populations of weak resources.

At the end of 1981, were being built around 10.000 dwellings, 3.000 of which should be achieved in 1982, with an investment for the year amounting to about 3,75 million contos.

Pre-fabricated Houses: This is an achievement, which in the beginning, tried to solve urgently the problem proceeding from the needs of relodging the displaced people returning from the ex-colonies. Thus, many tenders of contracts have been effected, where have been privileged the methods of easy construction, namely the pre-fabrication, aiming at, both the attainment of quicker and even more economical solutions.

At present, about 6.700 dwellings are still being built, 3.500 of which are foreseen to be concluded in 1982, the expected investment for this year amounting to approximately 1,5 million contos.

Development Contacts: This is a program started in 1974, which is based on a mixed promotion form and is a result of the link among the F.F.H., the civil construction enterprises and the Special Credit Institutions. Its aim is the promotion of the civil construction, either through supports or technical, financial and fiscal incentives, motivating it to the construction of buildings or parts of buildings intended to housing and social equipment, provided they are integrated in a correct urban planning, in the areas evidencing more lacks and subject to tables of final prices controled by the F.F.H..

.../...

In December 1981, were being built approximately 1.200 dwellings, being expected the conclusion of about 700 new dwellings in 1982, the level of investment for this year, being calculated in about 450 thousand contos.

Technical and Financial Support: Specific programs are being developed under this classification, which may be stated as follows:

Co-participated Works: This is a regime set up in 1945, by which the state * accepted to grant co-participations (40%/50% of the dwelling value or a fixed sum by dwelling), to the building of houses for families of lower incomes or in situations of relodging, owing to works of urbanistic redefinition in the habitation agglomerates.

In the end 1981, were being built about 500 dwellings, which conclusion is expected to 1982, the relative investment for the year being 200 thousand contos.

Loans to the Municipalities: This is a program started in 1974, which aimed at the improvement of the activity of the civil construction enterprises, highly weakened by the retraction in the demand, verified owing to the political changes held in the "25th April".

Through the sharing, on the level of the municipalities, of the sums attributed to the F.F.H. budget, and through the loans that have been made by this Institution with the Banks, it was intended to make decrease the consequences of the crisis, both in the big centers and on the level of the regions as well.

Up to the end of 1981, the F.F.H. had granted to the municipalities, financings amounting to 4,1 million contos.

At that time were being built almost 2.900 dwellings, 1.000 of which should be concluded in 1982, the investment for the year amounting to about one million contos.

* As from the seventies, such responsibility belongs to the F.F.H.

.../...

- . *Loans to the Economical Housing Co-operative Societies: This program was started in 1975 by the F.F.H., having as result a considerable increase of the number of established co-operative societies, which were 181 in 1978, involving 46,5 thousand co-operativist.*

The aims of the production point initially towards yearly volumes of about 5 thousand dwellings, which number, however, has never been attained, due to the several difficulties arisen, mainly in the areas which involve the acquisition of the necessary building sites, under suitable conditions, as well as the financing required for the execution of the relative projects.

Nevertheless, including the dwellings promoted by the economical housing co-operative societies and by the inhabitants' associations, we verify that a high number of dwellings is being built on 31st December 1981, viz. about 12.300, 4.000 of which are expected to be concluded in 1982, the yearly investment being 3,8 million contos.

On the other hand, and concerning the programs under review, the loans granted by the F.F.H. until 1981, amounted to about 9,3 million contos.

- . *Self-Construction and Program of Recovery of Degraded Real Estate (PRID): these programs, in the scope of the F.F.H. as well, intend to make possible solutions in charge of the interested parties (Municipalities and Private Persons), aiming at the utilization of the availability of some own means, human, financial and technical ones, both in the building of new dwellings, and in the recovery and improvement of dwellings (residence of the owner or lease), which indices of maintenance and habitable state are deteriorated.*

At present, the F.F.H. is supporting financially these two programs, through loans granted, with sums utilized up to the end of 1981, reaching already about 3,3 million contos.

.../...

At the beginning of 1982, were in operation 3.810 transactions of this kind, which financial involvement, to be fulfilled in 1982, is expected to attain about 380 thousand contos, namely, about 100 contos/dwelling.

The Role of the Banking System in the Financing to Housing and Construction.

The portuguese banking system assures the financing to the different sectors of the economic activity and grants its financial supports to the relative economic agents in the transactions connected with construction and housing purchase.

In its composition, the banking system includes essentially the commercial banks and the savings and investment banks, which act directly in the capital money market, under the direction and the co-ordination of the Banco de Portugal, which is entitled to apply the Government economical and financial policy, within its own scope.

The intervening of the banking units operating in the market, is carried on, so as to safeguard a principle of specialization, since within the savings and investment banks, the three Special Credit Institutions denominated: - Caixa Geral de Depósitos, Crédito Predial Português and Caixa Económica de Lisboa, are entitled to the main portion of credit to construction granted to builders/real estate promoters, which medium terms for the loans are from 1 to 5 years.

The same Special Credit Institutions are operating in an almost exclusive regime (with the more significant exception of the special savings regime, which is put into practice by all the system units) in the financing to purchase/construction of dwelling-houses, by means of special credit facilities with long reimbursement terms, that may reach 30 years. The commercial Banks are preponderantly entitled to effect the short term transactions (until 1 year), although such transactions may be handled as well by the aforesaid special credit institutions, under a multi-valent perspective.



Thus, the quantitative evolution (balances) of the relative positions assumed in the last years by the different credit institutions, operating in the housing and construction sectors, according to the nature of the financings granted, is clearly shown in the following table:

TABLE II

Housing and Construction Financing According to the Terms and Types of Credit Institutions

DESCRIPTION		TERM OF THE TRANSACTIONS											
		UP TO 1 YEAR			FROM 1 TO 5 YEARS			OVER 5 YEARS			TOTAL		
		1978	1979	1980	1978	1979	1980	1978	1979	1980	1978	1979	1980
Financing to construction and Public Works	Commercial Banks	22.828,3	22.855,0	28.322,0	4.689,5	5.202,0	6.551,0	50,2	465,0	921,0	27.568,4	28.522,0	35.794,0
	Savings and Investment Banks	4.354,5	5.387,0	4.654,0	19.176,9	27.252,0	34.379,0	21.752,8	10.559,0	14.351,0	45.286,2	43.198,0	53.384,0
	Total	27.184,8	28.242,0	32.976,0	23.866,8	32.454,0	40.930,0	21.803,0	11.024,0	15.272,0	72.854,6	71.720,0	89.178,0
Financing to Private Individuals to purchase its own dwelling-house	Commercial Banks	2.886,2	582,0	1.000,0	395,5	337,0	694,0	1.727,0	4.716,0	8.932,0	5.008,7	5.635,0	10.626,0
	Savings and Investment Banks	46,7	39,0	137,0	3,2	1.694,0	444,0	19.808,2	47.556,0	78.031,0	19.858,1	49.289,0	78.612,0
	Total	2.932,9	621,0	1.137,0	398,7	2.031,0	1.138,0	21.535,2	52.272,0	86.963,0	24.866,8	54.924,0	89.238,0
Overall Amount													
		30.117,7	28.863,0	34.113,0	24.265,5	34.485,0	42.068,0	43.338,2	63.296,0	102.235,0	97.721,4	126.644,0	178.416,0

Source: Banco de Portugal.

The financial monetary policy developed in the country, mainly as from 1978, has been deeply characterized by the utilization of the instruments considered more suitable, although they are subject to eventual fluctuations, tending towards the execution of the following general aims of the Country's economical policy considered as having priority and deserving mention:

- Reduction of the inflation rhythm:
- Tendencial re-balance of the balance of payments:
- Increase of the national product:
- Reduction of the unemployment level.

Since, as it is understood, there is not a complete compatibility in the choice of the steps tending to assure the simultaneous execution of the whole stated purposes, the definition of the policies to follow, has obviously privileged, either the needs to increase the domestic production (aiming at the exports and substitution of the imports) and the struggle against the unemployment, or even the struggle against inflation and the disaggravation of the external accounts.

The State, in the performance of its own action and further to the operating of the fiscal and budgetary policies, agreeable to the above mentioned aims, has founded its credit policy on the utilization of the following instruments and standards:

- Interest rate and relative compatibility with the conditions existing in the domestic and external markets:
- Credit Limits to the economy and relative share by the different credit institutions, considering the nature of its applications:
- Credit selection, favouring the applications with bigger national interest (investment, exports, etc.)

.../...

Thus, the evolution verified in the banking credit to the economy and the housing and construction sectors in the last years (1978/1981), is evident in the analysis of the following table:

TABLE III

Table of the Banking Financing of the Housing and Construction Sectors.

	1978	1979	1980	1981
A) G.D.P. f.c. (1)	713.700	918.912	1.098.100	1.288.600
W.V. - Construction (Continent) (2)	76.302	83.226	111.900	142.000
Gross Added Value - Construction (Continent) (3)	37.259	41.028	54.800	69.500
B) Domestic Financing (4) (balances)	874.893	1.100.770	1.243.081	1.466.233*
Construction and Public Works Financing (5) (balances)	57.855	71.719	89.178	119.818*
Financings to private individuals for housing (6) (balances)	36.867	54.922	89.238	119.571*
(5) + (6) = (7)	94.722	126.641	178.416	239.389*
(2) / (1) = (8)	0,1069	0,0906	0,1019	0,1102
(4) / (1) = (9)	1,225	1,198	1,132	1,138
(5) / (3) = (10)	1,55	1,74	1,62	1,70
(6) / (7) = (11)	0,389	0,434	0,500	0,500
(6) / (4) = (12)	0,042	0,049	0,071	0,081
(7) / (4) = (13)	0,108	0,115	0,143	0,163

Source: Banco de Portugal (Reports) and MHOPT (Seasonal Reports)

(1) - G.D.P. f.c. - Gross Domestic Product factors cost.

(2) - W.V. - Works Value

(3) - G.A.V. - Gross Added Value

* These values concern the balances coming from the credit portfolios in the commercial banks and in the S.C.I. (Special Credit Institutions), as of July 31st, 1981.

.../...

In fact, the following main conclusions are shown:

- a) The result of the restrictive credit policy followed since 1978, explains the contraction verified in the ratio domestic credit (balances)/G.D.P.f.c., which went from 1,225 in 1978 to 1,132 in 1980, being still to point out that the recovery verified in 1978, by the way, as much significant as it is right that the credit values only concerns the balances attained in July 1981, was the cause of further restrictive steps, on the part of the monetary and financial authorities, with a special incidence in the second half-year 1981 and even in the first half-year 1982, essentially through the bigger control of limits and the increase of the interest rates.
 - b) However, housing and construction credit increased continuously in the last years, since, whereas in 1978 it represented no more than 10,8% of the total domestic credit, in 1981 (July), such percentage reached already 16,3%.
 - c) The strengthening of the position stated to the housing and construction credit, assumes a special meaning, considering even a quite positive progression in the years under review to the ratio: construction and public works financing/G.A.V. construction, which amounted to 1,55 in 1978, while the value reached in 1981* was 1,70, obvious evolution of the proportional increase of the credit volumes placed at the disposal of these fields of activity, whether we compare them to the credit volumes placed at the disposal of the economy by the banking system.
 - d) The absorption on the part of the housing and construction financing of more and more significant portions of the domestic credit in Portugal, is however a result that comes essentially from the considerable increase verified in
- * As regards to the credit (balances), we point out that the stated values concern the countings attained relative to July 1981.

.../...

the component of the house financing for individuals, what arose clearly from the promotion policy of the financing to the purchase/construction of ones own dwelling-house, set up by the successive governments since 1976. This explains why, whether we compare the housing financing (balances) to individuals with the overall housing financing (balances), the former rises from about 39% in 1978 to 50% approximately in 1981 and in the same direction, the comparison between the positions of the relation-housing financing to individuals (balances) / domestic financing (balances), points towards an evolution from 4,2% in 1978 to 8,1% in 1981.

The role of the Special Credit Institutions in the scope of the Housing and Construction Financing.

As stated before, the aforesaid Special Credit Institutions (S.C.I.) are entitled to perform a role of high responsibility, concerning the financial support to the housing and construction sectors, also as a result of the relative social aims fixed in their statutes.

Thus, for instance the article 3rd of the Crédito Predial Português statutes sets up the following in the paragraph a):

"It is a social aim:

- a) To promote the real estate construction, either for industrial and commercial purposes, or for housing, specially when it is intended to social lodging, namely through direct loans or co-operating in the financing of urbanization and constructions plannings;..."

A quite appreciable question for the credit institutions acting in the housing and construction market, concerns the nature of the financial resources utilized in this type of operations and its complete suitability to the relative purposes.

.../...

Therefore, we may prove that, at present, the referred units of the banking system make use basically of the private and public savings, materialized in the deposit accounts opened and operated in name of the different economical agents.

The referred deposit accounts are classified according to the relative terms, the main distinction existing between the demand deposit accounts and the time deposit accounts. At present, the conditions in force for the different types of accounts, are as follows:

TABLE IV
Interest rates of the Deposits

Demand deposits *	deposits at notice	money-boxes deposits	time deposits
up to 150 contos 4%	less than 90 days 11%	18,5%	less than 90 days....11%
over 1 contos 2%			from 90 to 180 days..15%
			from 181 to 1 year...21,5%
			over 1 year.....23%

* to individuals, co-operatives societies with non-lucrative aims, Associations and Institutions of public utility.

The composition of the different types of alien capital available with the S.C.I. points towards the prodominancy of the time deposits ($\approx 80\%$) proportionally to the demand deposits (or at notice) ($\approx 20\%$), although these institutions may still resort, either to the refinancing with the Central Bank, or to the inter-bank money market, the latter being essentially characterized by the short-term of the relative transactions and aiming to assure promptly and by

.../...

transfer of positions, the cover of the minimum liquidity/^{limits}in the system units more affected in this regard.

It is easy to notice an obvious difference between the nature of the available financial means and the relative applications, owing to the diverse characteristics of cost/price and flexibility/immobilization.

In fact, the S.C.I. make use of usually available means, at terms not exceeding 1 year, in transactions of medium-term financing (3 to 5 years), in the long term construction financing (up to 30 years) and in the house purchase financing.

It is still evident that whatever the case, though to a larger extent in the cases involving credit to the house purchase, the medium differences in the interest rates between the relative assets and liabilities can not be considered reasonably profitable.

However, the need to surpass the stated difficulties through a larger resort to other sources of funds, has been considered by the referred S.C.I., in which it will be possible a better compatibility with the nature of the relative applications. To this purpose, some of the following means may be followed or developed in the near future:

- Mortgage credit;
- Special funds of the State, deposited in the S.C.I.;
- Other refinancing forms;
- Bond market (for instance housing securities);

III - CREDIT FACILITIES

For housing purchase/construction

A resolution by the Ministry Council dated 24th February 1976, fixing a new financing system to be used in the purchase of the permanent dwelling-house,

determines the point of convergence of new financial solutions, tending to promote the highest interest of the banking system (S.C.I.), not only in the progressive solution of the domestic housing problem, but also in giving motive to its contribution for the promotion of the civil construction field, then going through a deep crisis, which main cause was perhaps the missing of a market for the flowing of its products (dwelling-houses).

The main characteristics of the system created then, were based on the following basic principles:

- 1º Allowances by the state of a part of the contractual interest rate fixed for the operations.
- 2º Interest rate in charge of the borrowers, varying from 4% to 9%, according to the annual income per head stated by the borrowers in the beginning.
- 3º Reimbursement terms of the loans considerably extended, reaching 25 years, being set too, in accordance with the same annual income per head stated.
- 4º Adoption of the procedure of estimating the relative monthly instalments, on the basis of the equivalent interest rates.
- 5º Limiting of the admittance to the system of the situations in which the value of the dwelling to be financed does not exceed 1.000 contos and 6 contos/ square meter and also of those, where the annual income per head of the household does not exceed 120 contos.

The system we have just characterized allowed the establishment of a considerable permanent housing market, giving strength to a certain improvement verified then in the civil construction sector, reason why, it was developed owing to a new and more improved credit system, which rules are set by the Decree Law Nº551/77 dd. 14th December, bearing the following main features:

.../...

- a) The differentiation of the allowance rate changed, not only in view of the income per head of the interested household, but also in view of the square meter cost of the dwelling area.
- b) Inclusion of the decreasing principle of the foreseen allowance, as from the second year of the loan life, what means the correct intention to lighten the heavy load of allowances inciding on the State General Budget.
- c) Participation of Banco de Portugal, which appears together with the State and the own S.C.I. in its quality of supporting agent, being thus borne among the three referred agents, the overall difference of the interest rate, which was not collected directly from the borrowers, concerning the maximum interest rate in force, and equivalent to the ^{term of the} operations under review.
- d) Implicit possibility to update the framework parameters previously established - values of the dwellings appraisal and incomes "per head" through the regulations published regularly.

The relative loss of efficacy verified since 1979 in the demand of this kind of credit transactions lead to the replacement of the system provided by the Decree Law Nº 515/77, by the new credit system provided by the Decree Law Nº 435/80, dd. 2nd October, which remains still in force and with which we tried to assure a higher flexibility in the temporary evolution of the instalments to be borne by the borrowers, in order to make them more suitable with the own structure of the income produced in the country.

The stated flexibility really means ^{an} enlargement of fluctuation in the instalments borne by the borrowers during the life foreseen for the relative loans, resulting thus that the same initial capital corresponds to a smaller financial effort to the borrowers in the beginning of their loans life. Therefore, the new financing standard means an even higher capacity of indebtedness of the interested parties within a same frame of the household budget.

We present below

a short outline, stating the credit system under analysis, emphasizing the following points:

Aim: Purchase of permanent dwelling-home.

Guarantee: 1st mortgage on the financed dwelling.

Contractual interest rate: The maximum legal rate in force at each moment, for this kind of operations, being borne by the borrower, Banco de Portugal and S.C.I..

Plan of the instalments borne by the borrowers: The estimate of the instalments at the interest rate borne by the borrower is done in a different way, whether the loan is in the 1st or in the 2nd phase.

In the first phase (4 first years, in the types A and B or 5 first years in the types C and D), the first instalment payable by the borrower is estimated in applying to the borrowed capital (utilized), the relative monthly interest rate and the percentage of 68% on the responsibility determined, effecting the immediate capitalization of the amount of the interest worked out and not collected, due to its deferred payment.

For the 1st phase, the instalments at the rate chargeable to the borrower will rise 12% yearly and will remain unchanged within each year.

In the 2nd phase (remaining term of the loan life) the first instalment is estimated through the suitable rule of the financial estimate (present value), following thereafter, the annual changes of the instalments (+2% in the type A and +3% in the types B, C and D) - remaining set within each year.

In the cases of construction, of the permanent dwelling-house, is considered a term of utilization of the capital (in relation to the construction), usually 24 months extensive for further 6 months, for which term the interest is worked out day by day, by application of the interest rate chargeable to the borrower to the capital in debt. After the referred term of utilization,

.../...

follows the 1st phase of the loan life, as stated before and at last the 2nd phase thereof, which extension continues for the remaining term of the granted loan.

Further financial benefit: The interested parties may as well make temporary use of a "familiar subsidy", for access to housing, since the dwelling to purchase or construct is included in the type A of the system and since the annual income per head of the household is not higher than that fixed in the Scale III of the credit system under review.

In order to attain a better understanding of the other conditions put into practice by the S.C.I., we prepared the following summary table:



Classes of dwellings	Maximum value of the dwelling (contos)	Maximum value of the loan in view of the guaranty	Maximum loan term (years)	Interest rate borne by the borrower	Family subsidy		Allowances by the banking system		Value of the 1st instalment borne by the borrower (P/capit.=1.000c)	Value of the last instalment borne by the borrower (P/Capital=1.000c)			
					Dwellings-houses up to 16c./m ²	up to 18c./m ²	Banco de Portugal	S.C.I.			In Escudos	In Escudos	
A up to 18c./m ²	up to 2.000	95	30	17 %	-	-	3,75 %	1,5 %	8.955	23.139			
Annual income per head of the household (contos)	Scale I up to 95 contos	up to 2.000	95	30	17 %	8 %	5 %	3,75 %	1,5 %	2.521	4.821	23.139	23.139
	Scale II from 95c. to 155c.	up to 2.000	95	30	17 %	5 %	3 %	3,75 %	1,5 %	4.681	6.459	23.139	23.139
	Scale III from 155c. to 200c.	up to 2.000	95	30	17 %	2 %	1 %	3,75 %	1,5 %	7.303	8.125	23.139	23.139
B up to 23c./m ²	up to 2.750	90	25	18,5 %	-	-	3,75 %	1 %	9.607	27.328			
C over 23c./m ²	up to 3.500	85	20	20,75 %	-	-	1,5 %	-	10.769	28.650			
D over 23c./m ²	over 3.500	75	15	22,25 %	-	-	-	-	11.460	30.255			

Notes: 1) The present structure of interest rates presupposes the contractual interest rate of 22,25%, while nowadays the maximum interest rate in force is 26%.
 2) The interest rate of the family's subsidy will be reduced yearly by 1%, as from the 4th year (inclusive) of the loan life.

A new credit system was created recently for the purchase/construction of housing, as provided by the Decree-Law Nº 340/80 dated 11th December, which conceptual standard is based on the housing-savings systems, which has already traditions in some countries, including Portugal, where another variant had already been attempted, as from 1979, although without success.

The reasons for the unsuccessfulness of the established system, are basically due to the quick disadjustment of the financial plans initially foreseen, in the phase of the savings constitution; which still become easily disadjusted, in view of the quicker rise verified in the cost of the dwellings, discouraging often the execution of the operation of the dwelling purchase/loan, by lack of available financial means (accrued savings + loan), to cover the market price of the demanded dwelling.

Though the system set by the above mentioned Legal Dispatch has not yet been put into practice, we shall state below its main premisses:

As regards to the deposit account:

Holders of accounts: The households whose annual gross income is situated within an interval fixed yearly.

The non-released people under legal age.

The unemployed who are less than 25 years old.

Savings plan: The deposits are effected by an initial instalment and by regular monthly instalments.

Generally, the instalments can not be inferior to 10% of twelfth of the gross annual income of the household, except the last one.

Interest rate: The interest rate due to the "housing-savings" deposits have the same interest rate of the time deposits over one year, benefiting still from the whole fiscal

advantages in force for the time deposit accounts and capital tax exemption as well.

However, in the cases of advanced withdrawal both financial and fiscal punishments are applied, provided same are not duly justified.

As to the loans:

Access conditions: Inclusion of the loans in the purchase/construction of permanent dwelling-house.

Non-existence of other subsidized loans with the same aim, in name of the same holders.

Fulfilment of the "housing-savings" deposit account with the minimum balance, as it is determined.

Amounts: Within the values of the dwellings appraisals effected by the S.C.I. and still without exceeding the maximum limits set in relation to the gross annual income of the household and the construction cost by square meter.

Interest rate: To be determined by Banco de Portugal.

Guarantee: 1st mortgage of the dwelling to be purchased or built.

Reimbursement Plan: The loans will be repaid within the maximum term of 30 years, through monthly instalments, which will represent a constant percentage (at present 25%) of the twelfth of the household gross annual income.

Capitalization: The amounts concerning the loan instalments, which exceed the values of the instalments established in the reimbursement plan borne by the borrower, will be capi-

.../...

talized immediately.

Compensations accounts with the State: The State will compensate the S.C.I., whenever the solvency terms initially determined for each loan, will be affected, namely whenever the gross annual income of the household rises at a rate inferior to the interest rate in force.

At last, we include a summary table concerning the main parameters, which have already been fixed by the Government, as to the present system:

TABLE VI

Gross annual income scales of the households (in contos)	Maximum limits of the loans (in contos)	minimum balances of the deposits	maximum values of the loans by square meter of covered area (in contos)
from 280 to 350	1.600	6/12 of the gross annual income of the household	26
from 350 to 450	2.000	" " " "	30
from 450 to 600	2.750	9/12 of the gross annual income of the household	30
from 600 to 1.000	3.500	" " " "	32
from 1.000 to 1.500	4.000	" " " "	32

Notes: On the maximum limits of the loans stated in the 2nd column, shall be deducted the minimum balances of the relative deposits, which must be applied too in the payment of the dwellings to purchase. The differences eventually originated between the overall deposited balance and the aforesaid minimum balance, may still be utilized by the borrower in the payment of the dwelling cost, over the loan value, increased by the same minimum balance.

The system we have just described, causes some problems to the S.C.I. action, of which, the underlying standard of capitalization is not the smallest one.

Actually, the estimates done, often point towards the application of a multiplying factor higher than 6, to the initial borrowed capital, deserving still a special mention the factor that, in most cases, such potentiation of the borrowed capital, is accrued until it reaches its maximum, more than 15 years after the granting of the relative contracts.

Therefore, it must be admitted that the favourable effects to the S.C.I., resulting from the reinforcement of the additional savings means, which the created system shall indeed allow to collect, will quickly be absorbed and even broadly exceeded by the applications proceeding from the loans to be granted, due to the capitalizations the same will cause.

Thus, it may be concluded that this system does not even safeguard the desirable balance principles between the means of savings accrued in the S.C.I. and the obligations resulting from the financial applications inherent to the real estate investment in housing, when such applications proceed from the credit system under analysis.

For that reason, the continuation of such policy implies the need, here emphasized, to consignate new resources in behalf of the S.C.I., which extent and nature show to be more suitable to the conditions of credit put into practice in the the sectors under analysis.

The special savings system for portuguese emigrants is an important part in the correct connection between the fiscal, credit and exchange policies of the Country. It grants fiscal and financial advantages to the emigrants, who complying with the provisions of the law, have opened special savings deposit accounts, which enable them to apply to loans to be granted by

.../...

the credit institutions, under the following conditions:

Beneficiaries: portuguese emigrants or equivalents, holders of special savings accounts, with a balance showing the countervalue in Escudos of foreign currency transfers, or other payment means on the exterior, as well as another acceptable operations.

Applications: To facilitate means intended to the purchase, construction or maintenance of urban or rustic buildings.

To facilitate means intended to the industrial investment, according to the relative projects.

Amount: limit of 3.000 contos/account.

It can not exceed the double of the special savings account balance, on the occasion of the proposal presentation.

It can not be higher than 80% of the appraisal value of the real estate concerned, the stated percentage being decreased to 50%, in the cases of industrial investment.

The amount of the loan, added by the whole balance of the relative deposit account, must be completely utilized in the payment of the real estate to be financed.

Term: not over 12 years.

Rate: 12,5%.

Guarantee: Generally, the first mortgage of the real estate to be financed.

To the civil construction enterprises

The financing standard of the civil construction undertakings in charge of the sector enterprises, is put into practice by the credit institutions, on the basis of the following rules:

Limits: 75%; 80%; 85% of the commercial value assigned to the undertaking, according to its framework in pre-fixed appraisal standards.

Interest rates: The maximum rate in force for operations at term between 2 and 5 years. The allowance borne by the Credit Institutions shall be from 1% to 2%, according to the classification and framework of the undertaking effected by the Credit Institutions.

Utilizations: In relation to the construction, according to the works situations.

Reimbursement plan: 3 years with 2 years as lack period - eventually postponable for further 2 years; adjustable to the commercialization plan and inherent cancelling plan to be set.

Guarantee: 1st mortgage of the real estate concerned.

Consequently, the credit institutions try to encourage the projects of lower unitary costs - granting higher allowances and higher financing percentages - leading thus to an even more discerning utilization of the multiple or narrow available resources.

In this scope is included with peculiar meaning, the already mentioned development contracts program for housing (D.C.H.), as regards to which the S.C.I. concerned have been granting subsidies, now amounting to 6,5 %/year, provided the interest rate borne by the enterprises is fixed at 18,5 %/year (including the subsidy of 2%/year, granted by the Banco de Portugal).

A quite appreciable question is the eventual sufficiency of the financing means, which are

.../...

placed at the disposal of the enterprises by the Banks, in the area of the standard we have stated before. Due to its importance, we present below an outline of this matter.

For that purpose, we start on presenting the following structure-type of costs for the average housing construction:

Substructured lands	- 20 %	of the construction direct cost			
Projects	- 4 %	" " " "	"	"	"
Financial charges	- 27,5 %	" " " "	"	"	"
Profit	- 13,5 %	" " " "	"	"	"

S. V. = Sale Value = 1,65 x c.d.c.

viz:

Construction direct cost (c.d.c.)	= 60,6 % S. V.
Substructured lands	= 12,1 % S. V.
Projects	= 2,4 % S. V.
Financial charges	= 16,7 % S. V.
Profit	= 8,2 % S. V.

Therefore, it is evident that, notwithstanding the characteristic of simple average assigned to the above mentioned costs structure, on the basis of up-to-date appraisals, as a rule put into practice in the credit institutions acting in the present financing system, the above referred limits are sufficient to assure the cover of the relative direct costs of constructions, increased by the financial expenses. In the cases of social constructions, they are still sufficient to cover the cost of the relative lands.

The previous conclusion is however strengthened, once we have to consider other

financing sources for the civil construction enterprises - over the desirable/strengthening of their own capital - with a special emphasis for the following ones:

- a) Reinforcement supports of guarantee fund, namely through short-term credit with the banks.
- b) Supports to the investment.
- c) Bank guarantees - in replacement of the provisory and definitive deposits, for advanced payments and for the replacement of reserves in debt.
- d) Financings in the quality of advanced payments for the purchase of dwellings, by their promiser buyers, with the inherent transfer to the buyers of the responsibilities concerning the construction financings (capital + interest) payable by the sellers.
- e) Practice of operations inserted to the financing operations for construction, whether duly justified.

In any case, the analysis of such operations is based not only on its inherent principles (aim, parties, etc.) but also and mainly on the reputation that the borrower enterprise enjoys with the Banks, generally based on banking inquiries and also on the technical-economical analysis of the borrowers, which is a complex task, in as much as the portuguese banks do not yet hold a complete data processing bank, which centralizes and holds available and up-to-date the position of the liabilities assumed by the clients with the Banks. There is just a project, which is being studied at Banco de Portugal and which we hope will be achieved in the near future.

As it was our aim, the summary of the subjects we have dealt with in this article, points towards the financing sector, which is actually an essential condition to the achievement of the investments in construction, which are missing in the country. However, we wish to emphasize that, mainly in the housing scope, such outlook is far from

being the only one, or even perhaps the most important for the opportun solution of our needs, being urgent the definition of a National Housing Project, which complies with the financial conditions and where may be considered too, in an integrated form, the following purposes, among others: existence of a suitable policy of lands; rationalization of plans, building material and building processes and also the availability of an easier and efficient procedure for the works licensing.

Lisbon, September 30th, 1982

SERVICIO DE REGISTRO
C/ CORRESPONDENTE LITIGIOSO

Rodriguez (Lisboa)

4TH ANNUAL INTERNATIONAL SHELTER WORKSHOP
FOR SENIOR PROFESSIONALS

COUNTRY PRESENTATION
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Sectors)

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 Towards a New Housing and Town Planning Policy

This paper has been developed in terms of an analytical process of the institutional and housing policies framework in the last years.

To understand it we have to take into account the fact that Portugal has passed through an unstable political, economic and social situation which is now tending to be stabilized and resolved.

This is especially true in the Housing Sector where serious efforts are being made to develop a new housing strategy. It was in this sense that the Workshop Theme 2 has been developed with the intention that, through the evaluation of the different inefficiencies which have occurred, we present the measures that are being implemented and studied.

ABBREVIATIONS (Agencies)

MHOP	-	Ministry of Housing and Public Works
GEP	-	Study and Planning Agency (MHOP)
FFH	-	Development Housing Fund
DGPU	-	General Direction for Urban Planning
DGERU	-	General Direction for Urban and Regional Equipment
DGSB	-	General Direction for Basic Sanitation
LNEC	-	Civil Engineering National Laboratory
CSOP	-	Public Works Superior Council
MFP	-	Ministry of Planning and Finance
SET	-	Secretary of the State for Treasure
SEO	-	Secretary of the State for Budget
BP	-	Bank of Portugal (Central Bank)
MJ	-	Ministry of Justice
DGCI	-	General Direction for Taxes and Contributions
MAI	-	Ministry of Home Affairs
DGARL	-	General Direction for Local and Regional Administration
GAT	-	Technical Support Cabinet (for several Municipalities)
CCR	-	Regional Coordination Committee
GAS	-	Sines Area Cabinet for Development
SMH	-	Housing Municipal Services (Management)
CNP	-	Pensions National Fund
FAIH	-	Housing Investment Support Fund
MHUC	-	Ministry of Housing, Townplanning and Construction

PART I

Brief Background Information on Country

The Land -- Geographic Characteristics

Population -- General Characteristics and Evolution

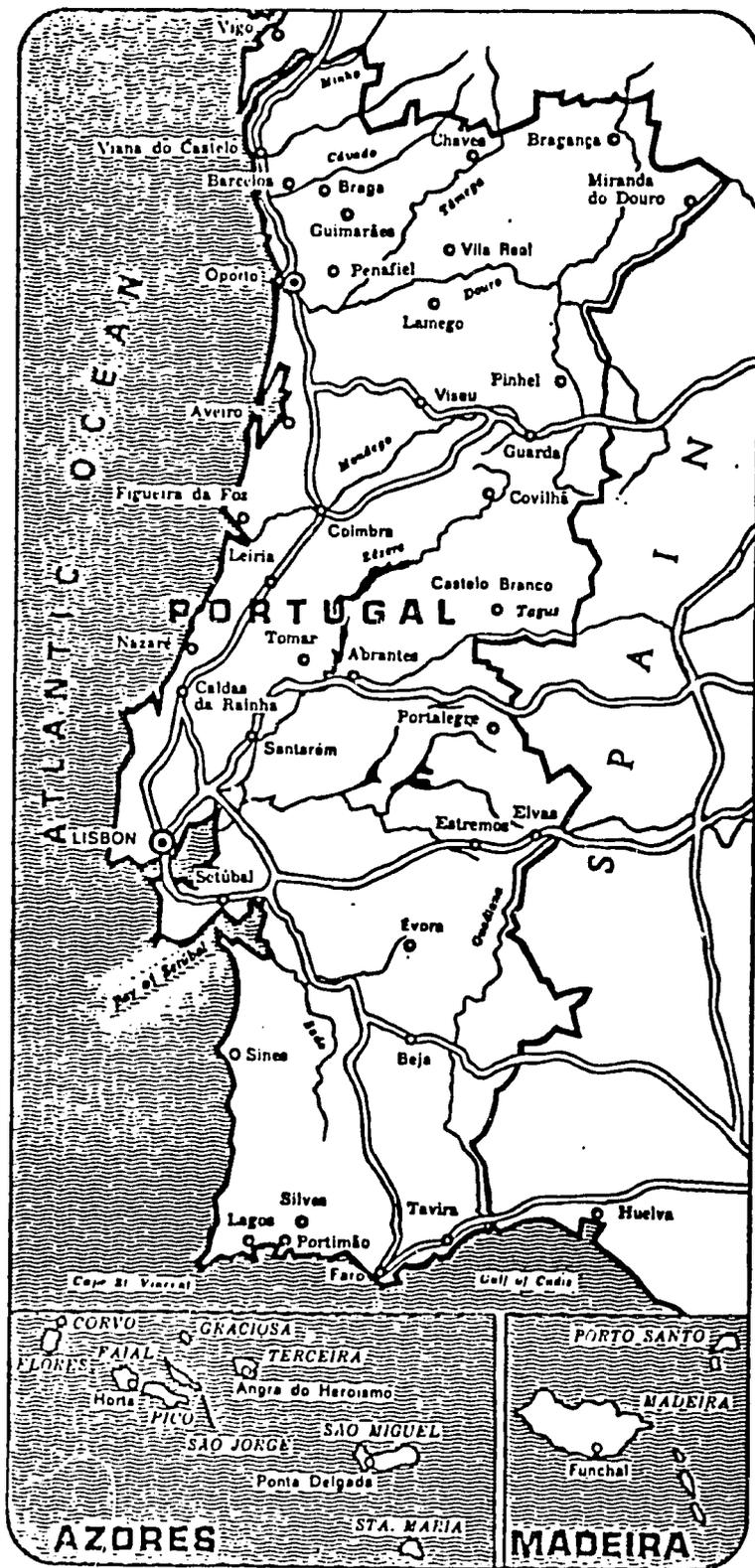
Income Distribution

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Shelter Sector Characteristics

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1. THE LAND -- GEOGRAPHIC CHARACTERISTICS

LOCATION AND AREA

Continental Portugal is situated on the west coast of the Iberian Peninsula, of which it occupies 1/5 of the total area. It is bounded on the north and east by Spain, and on the west and south by the Atlantic Ocean. The land frontier is 1,215 km. long. The territory has a rectangular shape, with an area of 89,000 sq. km. The frontiers of Portugal are the oldest and most stable in Europe. The archipelagos of Madeira and the Azores, which are part of Portuguese territory, constitute politico-administrative statutes.

GEOGRAPHIC CHARACTERISTICS

Portugal, (a bit of land hemmed in by the sea), enjoys a sharp geographic diversity in spite of her small size. On the whole, the River Tagus is the boundary line between the north and south of Portugal, contrasting regions with regard to relief features, rivers, climate, type of vegetation and crops, forms of settlement, etc.

RELIEF FEATURES, VEGETATION

To the north and south of the Tagus, the relief features present a sharp contrast. In the mountainous north, highlands predominate; 95% of them have altitudes of over 400 meters. The most important relief features, which are prolongations of the mountain chains of Spain, are diagonal to the coast and almost parallel to each other, their direction being from northeast to southwest. With few exceptions, this direction allows the moderating action of the Atlantic to penetrate inland, as well as the inner-penetration of the Atlantic and Mediterranean influences evident in the vegetation and agricultural exploitation of various regions.

THE CORDILHEIRA CENTRAL (Central Range) is the most important mountain range; it is dominated by the granite and schistous massif of the Serra da Estrela which contains the highest altitude in Portugal (1,991 meters).

The region to the south of the Tagus is made up of flat lowlands with an altitude of less than 200 meters, the outstanding features being the plains of the Ribatejo and Alentejo. Only a small area has an altitude of over 1,000 meters (Serra de São Mamede).

There are also contrasts between the coast and the interior, mainly in the region to the north of the Tagus. The coastal strip, which is relatively narrow, and the alluvial lands along the Rivers Vouga, Mondego and Tagus are low, but the altitude gradually rises as one goes inland where altitudes between 400 and 900 meters predominate, some of the ridges reaching a height of 1,400 meters (Geres, Marão, and Montesinho). The ridges with over 1,000 meters occupy large areas, although they are scattered. The most evident depressions are the valleys, which are often deep; frequent in the north, they play a valuable

economic role since they constitute lines of transit and penetration. Due to the climate, the vegetation is denser in the north than in the south. The most important species are the pine, the eucalyptus, the oak and the cork-oak which stand out in the landscape, characterizing the natural regions.

In the coastal regions subject to the influence of the Atlantic and in the area to the south of the Tagus, the seaside pine is widely distributed; the same tree is to be found in the north associated with plateau areas in the north. The chestnut-tree is mainly concentrated in the mountainous areas and plateaus of Trás-os-Montes and the Beiras regions. The cork-oak dominates the landscape in the south, above all in the western part of the Alentejo. The olive tree grows everywhere, but it is of greater importance to the north of the Tagus. The south, with its clearly Mediterranean climate, characteristic of warm and dry regions (almond, carob and fig trees); the undergrowth is in large part made up of oleander and cistus. With regard to the herbaceous vegetation of the north, mention should be made of irrigated areas devoted to pasture (meadows and marshes) which alternate with fields devoted to maize; the pastures are poorer inland in the north and mainly used for small animals. As a result of its Mediterranean characteristics, the south has deficient pastures. In the north, there is a large variety of flowers and small bushes that contribute to giving the landscape strong green hues all year round.

HYDROGRAPHY

The rivers of Continental Portugal flow into the Atlantic in two directions: to the west, which is the more important, and to the south (Algarve), in which only the River Guadiana is worthy of mention. The main center of hydrographical dispersion is the Serra da Estrela, on the slopes of which arise the country's three largest hydrographic basins: the Tagus, Douro and Mondego. Although all the rivers have an irregular flow, those in the north are greater in number and flow than those in the south. The longest rivers are: the Douro, Tagus and Guadiana, which rise in Spain; the first two have mighty tributaries on both banks. The longest river which rises in Portugal is the Mondego. The sea penetrates deeply inland at only four places: at Aveiro, the estuary of the Tagus, the estuary of the Sado and at Faro.

THE COAST

The coast of Portugal is about 840 km. long, which represents 41% of the country's boundary; there is 1 km. of coast for every 100 sq. km. of territory, and only a small area in the northeast (Trás-os-Montes) lies over 200 km. from the shore. As to its overall characteristics, it may be said that the coast has few indentations and islands and that it is affected by strong winds. The fact that the coastal strip is predominantly flat has facilitated contact among the population down through the centuries and thus created a single way of life.

From the mouth of the Minho, the river that serves as the frontier with Spain in the northwest, to the estuary of the Douro, on whose right bank lies the city of Oporto, the coast is low and sandy; continuing southward, from Espinho to Cabo Mondego, it is almost a straight line interrupted by the Aveiro lagoon at the mouth of the Vouga.

At the mouth of the Mondego lies the long beach of Figueira da Foz. Farther to the south, down to the estuary of the Tagus, the coastline rises and takes the form of cliffs alternating with beaches; in this stretch, Cabo da Roca (with a height of about 140 meters) is the western-most point in Europe. The city of Lisbon lies on the right bank of the Tagus which forms a broad estuary. To the south of this river the coast is sandy; from Cape Espichel to the River Sado it is cliffy, being dominated by the southern slope of the Serra da Arrabida. From the Sado to Cape St. Vincent (the southwestern tip of Europe) the coast is sometimes low and with dunes and sometimes high and cliffy; wonderful beaches are to be found along this part of the coast. Heading eastward from Cape St. Vincent, the southern coast stretches to the mouth of the Guadiana; this river serves as the frontier with Spain in the Algarve. The coast of the Algarve is made up of two areas with different characteristics: one, stretching from the Promontory of Sagres to Quarteira, is high, very indented, with beaches sheltered by rocks and a large bay (Lagos); the other, which extends to the Guadiana, is low, sandy and has long, wide beaches, a creek into which the sea penetrates deeply (at Faro) and several islands.

THE PRESENCE OF THE SEA

From the historical point of view, the sea played an extremely important part in the evolution of the Portuguese State. It was along the coast that the knights of the Portucalense County, in their struggles with the Moors, were able to make the quickest progress in the Christian reconquest of the territory, a task in which they were aided by the fleets of the Crusaders who were

heading for the Holy Land. The Algarve, the natural southern frontier, was conquered in the XIIIth century. Medieval Portugal was agricultural but with her there co-existed a Portugal that was devoted to fishing and coastal shipping. The experience acquired at sea was propitious to the development of sea-borne trade (exporting of wines, olive oil, dried fish and salt) and stimulated the improvement of the techniques of navigation that allowed Portugal in the XVth century to become the pioneer of the great enterprise of the maritime discoveries carried out over a century. In present-day Portugal the sea is still important because of the manpower occupied in fisheries (7% of the active population) the contribution it makes to the fish canning industry and the tourist attraction it exercises.

CLIMATE

Portugal is a Mediterranean country by nature and Atlantic by geographical situation. The Atlantic ocean is the great regulator of the climate. The distribution of the relief features together with the prevailing winds give Portugal a temperate climate. Differences of climate are nevertheless clear-cut to the north and south of the Tagus. The average annual rainfall is much higher in the north (a total of 875 mm. in Oporto in 1976 and only 380 mm. at Praia da Rocha in the south), and it is the same part of the country that experiences the lowest average annual temperature (6.3°C at Braganca in the interior northern area and 12.1°C at Praia da Rocha) and the greatest temperature ranges (in the interior northern region) due to the influence of the continental winds blowing from the heart of the Iberian Peninsula. The region to the south of the Tagus has a Mediterranean-type climate: long warm summers, short winters with little rain, high average temperatures. The warm dry winds blowing from North Africa (the Sahara) influence the climate on the coast of the Algarve, producing seawater temperatures that sometimes reach 22°C. In Portugal, July and August are the warmest and driest months. The average annual temperature in 1976: maximum 20°C, minimum 6.3°C.

THE ARCHIPELAGOS

MADEIRA

The archipelago of Madeira is made up of the islands of Madeira and Porto Santo and the Desertas and Selvagens islets. Total land area: 796 sq. km. It is situated in the Atlantic Ocean between 30° 1' and 33° 7' north latitude and 15° 51' and 17° 15' west longitude. The Portuguese discovered these islands at the beginning of the XVth century. The archipelago is of volcanic origin. Highlands predominate in Madeira Island, which has an elongated shape (a length of slightly more than 58 km. and a width of about 23 km.): the highest altitude is

at Pico Ruivo (1861 m.). At some points the mountains jut into the sea forming cliffs that are dozens of meters high and sometimes make the coast inaccessible. The island of Porto Santo, which is about 11 km. long and 7 km. wide, has lower altitudes than Madeira proper. The vegetation of the archipelago of Madeira is predominantly made up of species characteristic of southern Europe, although species from other continents have adapted themselves well. There are also remainders of the native vegetation. The southern slope of Madeira has been cleared up to about 700 meters to make room for agriculture. From that altitude up, the basic vegetation is the seaside pine, introduced in the XVIIIth century. The tops of the mountains have almost no vegetation. On the northern slope there are huge tree-ferns besides cistus, heather, etc. There are many short water courses, called ribeiras, in Madeira island. The most important are Ribeira dos Socorridos, Ribeira João Gomes (which flows into the sea at Funchal) and Ribeira Brava.

As a result of its geographical position, the archipelago enjoys a temperature, Mediterranean-type climate, especially on the southern coast of Madeira. On this coast, owing to the stronger sunshine and the fact that it is sheltered from the north wind by the mountains, the average temperatures are high and the winters are mild. In 1976, the average temperature at Funchal, which is the capital and the most important port of the archipelago, was: maximum 21.6°C., minimum 15.1°C. The island of Porto Santo is less damp than Madeira.

THE AZORES

The archipelago of the Azores is situated in the Atlantic Ocean between 36° 55' and 39° 43' north latitude and 24° 46' and 31° 16' west longitude. It is composed of nine islands and several islets, which form three groups: São Miguel, Santa Maria and the Formigas Islets (eastern group); Terceira, Graciosa, São Jorge, Pico and Faial (central group); and Flores and Corvo (western group), which lie the farthest from continental Portugal. The total area of the archipelago is 2,335 sq. km. The geographical position of the Azores, between Europe and North America (760 miles from Lisbon and 2,110 miles from New York) confers strategic importance on them. The archipelago was discovered by Portuguese navigators between 1431 and 1464. The soil is volcanic, which can easily be seen in the conic shape of the mountains and the large number of craters of extinct volcanoes. Thermal waters are abundant as are sulphureous effluxes. The mountainous nature of the archipelago is obvious in São Miguel Island, the largest crossed by a line of volcanic cones of which Pico da Vara is the highest (1,105 m.). Terceira Island also has many hills but it is in Pico Island that the highest altitude in the archipelago (2,351 m.) can be found. The craters of the volcanoes, which are locally called caldeiras or caldeirões, generally form

lagoons. There are several in São Miguel Island; the longest is Caldeira das Sete Cidades which has a perimeter of about 12 km. and is 70 m. deep. The spontaneous flora is varied, the maquis being mainly composed of laurel, heather, cistus and vinhático (a Brazilian tree). With regard to the sub-spontaneous vegetation (species introduced and acclimated), the outstanding forms are the white-wood (pau branco), the huge tree-ferns from Japan and New Zealand, the conifers from South Africa and the hortenses from China, which give the landscape of some of the islands a special charm. The seaside pine and the cedar have adapted very well to the climate of the Azores. The water courses are streams; those with the greatest flow are situated in the islands of São Miguel, São Jorge and Flores. Given their volcanic character, the islands possess a large amount of mineral and medicinal waters (sulphurous, ferruginous, etc.). An anti-cyclone usually forms over the Azores and then shifts to the north or south of the archipelago, influencing the climate of Atlantic Europe.

2. POPULATION -- General Characteristics and Evolution*

In 1981, the resident population in mainland reached 9,236,076 inhabitants, with a growth rate of 14.2% in the 70's, the biggest in this century.

Spatial distribution is characterized by a tendency to concentrate in the litoral, where seven districts (Oporto, Aveiro, Coimbra, Leiria, Lisboa, Setubal e Faro), representing 28.7% of the continental surface have 65.5% of the population with a density of 238 inhabitants/km².

Simultaneously, there is a continuous movement of the population in the most underdeveloped rural regions (mainly in the south) as a result of emigration and migration to towns which offer better opportunities.

In 1960 about 23% of the population lived in urban centers and in 1970, this percentage increased to 26%. As a result of the concentration tendency in the litoral, the rate of urbanization in that area is in general, higher, in particular in the districts of Lisbon (70%), Setubal (although with an important rural area - 57%) and Oporto (36%), where the most populous towns are located.

Another important component of population growth is the emigration which has been a constant fact in the Portuguese history. First to South and North America, then to Africa and then to Europe (France and West Germany).

Between 1960 and 1970 the population declined by 2%, partially due to the fact that 1.5 million Portuguese left the country, fundamentally to other countries in Europe. Sixty percent of the emigrants were men aged less than 45 and two of every three active workers who emigrated came from the agricultural sector.

But, since 1973/74 there has been a sharp decline in the number of emigrants. General conditions abroad, mainly in the "neighboring countries" easier to reach, have changed.

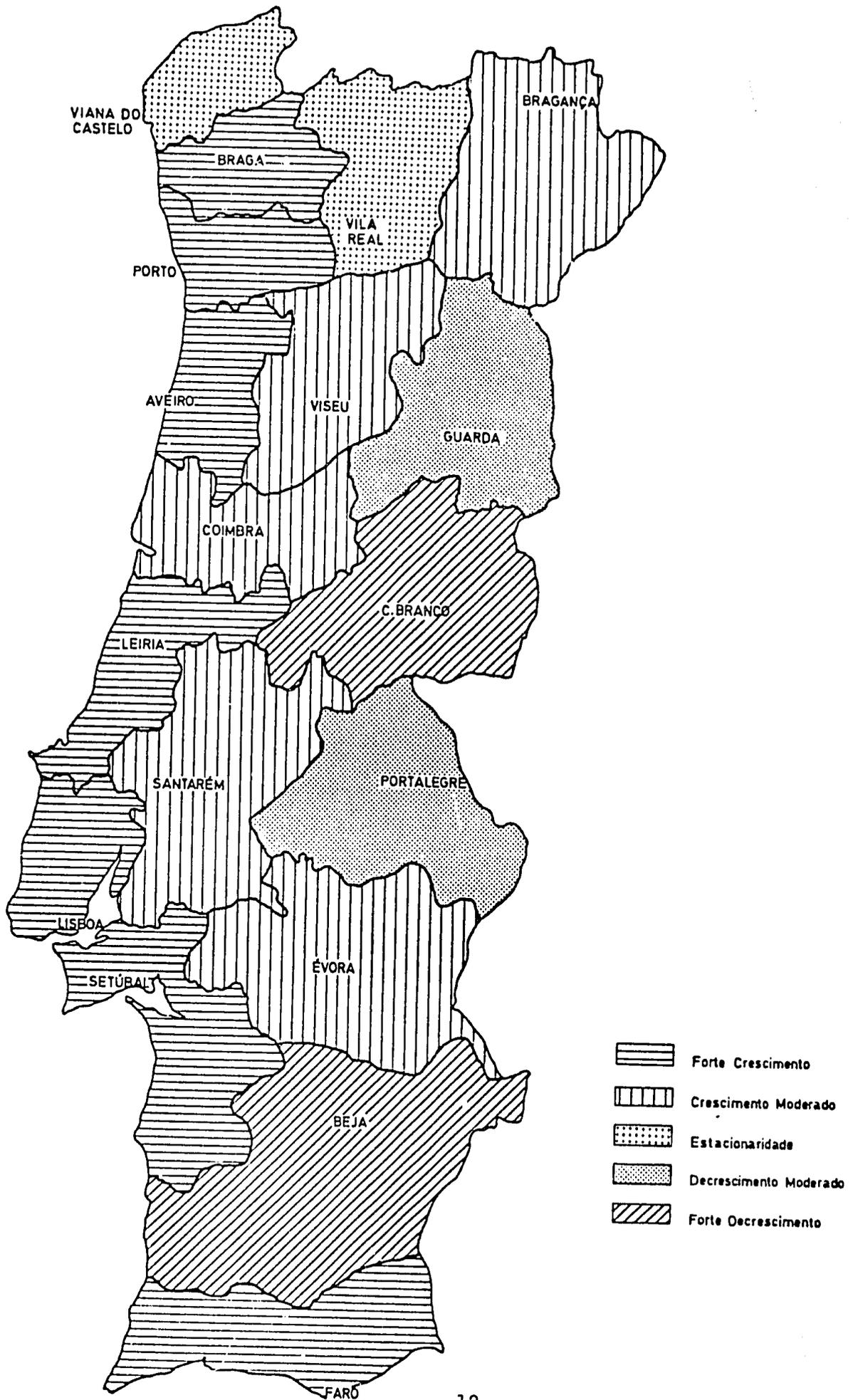
*The main characteristics of the population in 1981 are not yet available.

The slowdown in emigration and the return of the displaced people from the ex-colonies are the principal factors for the population growth in the last decade. It is important to say that, according to official statistics, the number of displaced people and emigrants from the ex-colonies totalled 500,000 between 1974 and 1976.

EVOLUTION OF THE POPULATION

YEARS	PRESENT POPULATION	INCREASE IN POPULATION	PERCENTAGE OF INCREASE
1900	5 016 267	-	-
1911	5 547 708	+ 531 441	+ 10,6
1920	5 621 977	+ 74 269	+ 1,3
1930	6 360 347	+ 738 370	+ 13,1
1940	7 185 143	+ 824 796	+ 13,0
1950	7 856 913	+ 671 770	+ 9,3
1960	8 255 414	+ 398 501	+ 5,1
1970	8 088 976	- 166 438	- 2,0
1981	9 236 076	+1 147 100	+ 14,2

EVOLUTION OF THE POPULATION BETWEEN 1970-1981



DISTRICTS ACCORDING TO POPULATION GROWTH BETWEEN
1970-1981

Distritos	Acréscimo absoluto da população	Distritos	Acréscimo relativo da população
Lisboa	+ 426 164	Setúbal	+37,0
Porto	+ 249 238	Lisboa	+29,5
Setúbal	+ 172 166	Porto	+19,1
Braga	+ 89 441	Faro	+18,7
Aveiro	+ 76 855	Braga	+14,6
Leiria	+ 51 718	Aveiro	+14,2
Faro	+ 49 969	Continente	+14,2
Coimbra	+ 31 290	Leiria	+13,6
Santarém	+ 22 887	Coimbra	+ 7,8
Viseu	+ 10 260	Santarém	+ 5,3
Bragança	+ 5 178	Bragança	+ 2,9
Évora	+ 3 958	Viseu	+ 2,5
V. Castelo	+ 2 681	Évora	+ 2,2
Vila Real	- 2 069	V. Castelo	+,-1,1
Portalegre	- 4 355	Vila Real	- 0,8
Guarda	- 5 270	Guarda	- 2,5
C. Branco	- 16 379	Portalegre	- 3,0
Beja	- 16 632	C. Branco	- 6,5
Continente	+1 147 100	Beja	- 8,2

Districts	Population in 1970	Population in 1981	Number of Families in 1970	Number of Families in 1981	Housing in the 1970 Census	Housing in 1981 Census
Aveiro	542 797	619 652	131 621	164 578	147 571	185 995
Beja	202 447	185 815	61 592	62 901	81 633	80 172
Braga	611 854	701 295	128 969	170 070	146 819	191 272
Bragança	177 945	183 123	47 651	56 566	63 280	70 394
C. Branco	252 241	235 862	76 943	77 867	103 088	107 712
Coimbra	402 208	433 498	116 510	135 426	143 341	165 790
Évora	175 284	179 242	55 147	63 589	70 559	75 795
Faro	267 122	317 091	84 555	105 250	106 920	140 271
Guarda	210 373	205 103	64 064	68 594	90 333	96 451
Leiria	378 848	430 566	107 224	133 628	132 124	164 094
Lisboa	1 592 463	2 061 627	466 509	693 930	484 919	714 832
Portalegre	145 077	140 722	47 366	49 465	61 965	65 925
Porto	1 306 352	1 555 590	308 951	419 992	323 443	436 281
Santarém	432 466	455 353	132 149	146 594	159 492	175 561
Setúbal	465 432	637 598	139 294	207 677	161 597	246 276
V. do Castelo	250 758	253 439	63 192	70 437	78 295	91 425
Vila Real	264 803	262 734	66 708	72 566	82 728	94 053
Viseu	410 506	420 766	110 237	123 671	146 796	155 499
TOTAL	8 088 976	9 279 077	2 208 732	2 822 801	2 584 903	3 257 798

EVOLUTION OF FAMILIES

Districts	Absolute Growth of Families
Lisboa	+ 227 421
Porto	+ 111 041
Setúbal	+ 68 383
Braga	+ 41 101
Aveiro	+ 32 957
Leiria	+ 26 404
Faro	+ 20 695
Coimbra	+ 18 916
Santarém	+ 14 445
Viseu	+ 13 384
Bragança	+ 8 915
Évora	+ 8 442
V. Castelo	+ 7 245
Vila Real	+ 5 858
Guarda	+ 4 530
Portalegre	+ 2 099
Beja	+ 1 309
C. Branco	+ 924
Continente	+ 690 069

Districts	Relative Growth of Families
Setúbal	+ 49,1
Lisboa	+ 48,7
Porto	+ 35,9
Braga	+ 31,9
Continente	+ 31,2
Aveiro	+ 25,0
Leiria	+ 24,6
Faro	+ 24,4
Bragança	+ 18,7
Coimbra	+ 16,2
Évora	+ 15,3
Viseu	+ 12,1
V. Castelo	+ 11,5
Santarém	+ 10,9
Vila Real	+ 8,8
Guarda	+ 7,1
Portalegre	+ 4,4
Beja	+ 2,1
C. Branco	+ 1,2

POPULATION OF URBAN CITIES
(with more than 10,000 inhabitants and location of districts
relative to the total population)

	Total Population	Population of Urban Centers	Percentage of Urban Population
1960	8 441 650	1 930 650	22,9
1970	8 611 110	2 197 335	25,5

RATES OF URBANIZATION

Distritos	1960.	1970	1975
V. Castelo	5,17	5,04	6,85
Traga	13,42	13,37	16,28
Porto	37,57	35,25	36,19
Aveiro	6,86	9,73	10,90
V. Real	7,97	8,62	11,29
Bragança	3,71	5,27	7,66
Viseu	3,52	3,01	5,30
Guarda	4,52	6,43	7,70
Coimbra	16,09	17,87	22,22
Leiria	9,42	11,59	13,94
Santarém	10,45	11,81	13,21
C. Branco	13,02	17,86	18,83
Jinhua	70,90	70,09	70,06
Selval	45,35	57,94	57,14
Portalegre	14,81	17,30	20,15
Évora	15,53	20,20	20,77
Beja	6,52	8,56	9,73
Faro	19,47	21,14	25,81

3. INCOME DISTRIBUTION

3.1. Income distribution depends on the level and evolution of economic activities.

The following table shows, then, the most recent values of the Gross Domestic Product at factor cost, at current prices.

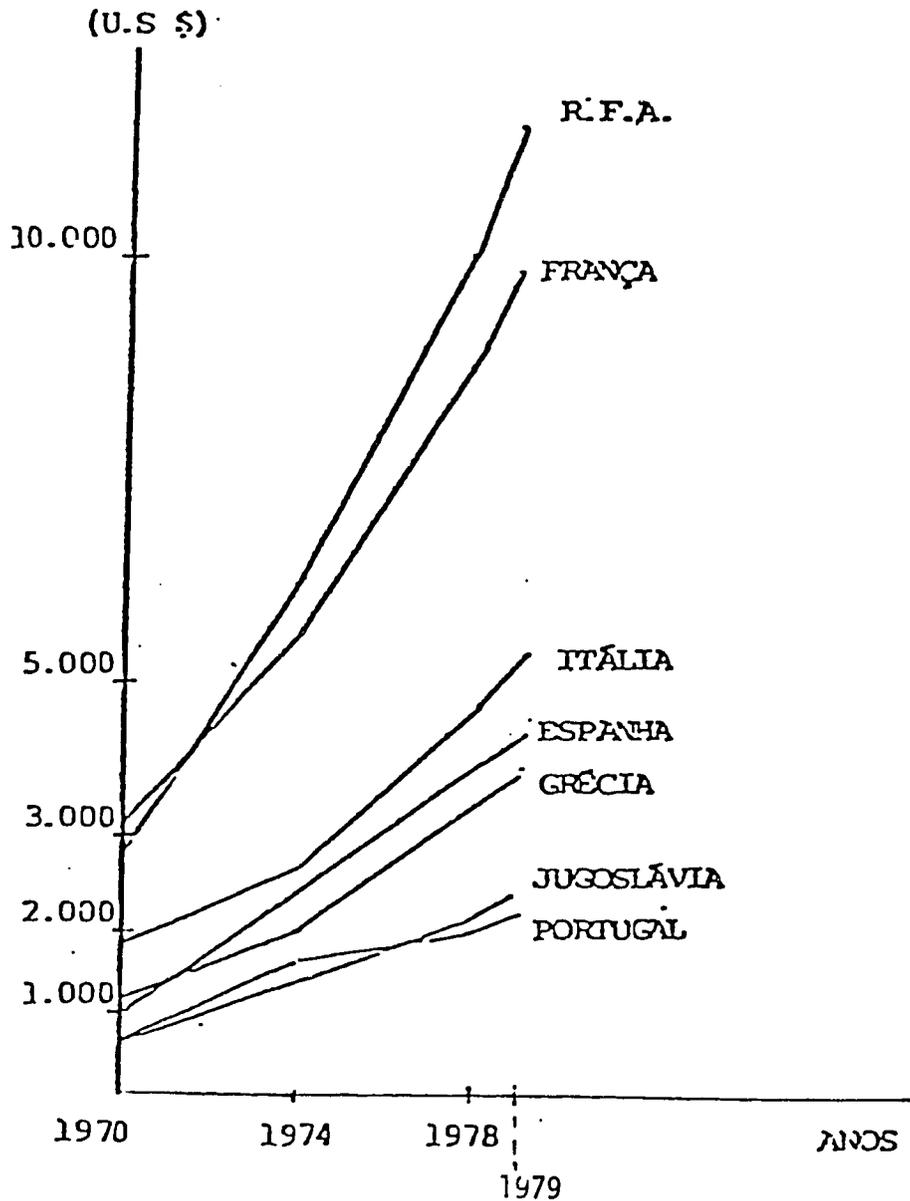
millions of contos

Years	Value of GDP	Growth Index 1973 = 100
1973	256,700	100,000
1979	922,100	359,200
1980	1,091,600	425,200
1981	1,300,800	506,700

GDP per capita at current prices reached the following amounts: 30, 450\$00/ /year in 1973 and 118 200\$00/year in 1980 (2,537\$00 and 9,850\$00 per month, respectively in the years referred).

In an international perspective, Portugal's position, in comparison with some European countries, regarding product per capita indicators is the following:

GDP PER CAPITA AT MARKET PRICES IN SOME EUROPEAN COUNTRIES IN 1970, 1974, 1978 AND 1979



From those countries, some of them at similar economic development stage, Portugal shows the lowest Gross Domestic Product per capita in 1979, with a value below 2 000 dollars.

3.2. The importance of wages (excluding Social Security contributions) on national income shows, from 1975, a strong decreasing tendency owing mainly to a global financial clearance in Portugal. In 1974, the percentage of National Income addressed to wages was about 52%, rising to 62.5% in 1976 -- a reflex of post-revolution social concerns -- falling down to 51.4% in 1979, becoming fixed in 1980 at 53.1%. Contributions to Social Security represented, respectively, 4.8%, 6.1%, 5.4% and 6.4% of the National Income.

Studies show that about 75% of household income come from production factors and the other 25% from transfers.

3.3. In 1980, household income distribution was estimated as follows:

Escalões de Receita Mensal (contos)	Distribuição das Famílias (%)	Distribuição das Receitas (%)
Menos de 10	11,0	3,7
10 - 14,9	16,1	9,0
15 - 19,9	20,4	15,5
20 - 24,9	15,8	15,5
25 - 29,9	12,8	15,3
30 - 34,9	9,1	12,7
35 - 39,9	6,6	10,8
40 - 49,9	5,7	11,1
50 e +	2,5	6,4
Total	100	100

In 1980, the first household quartile represented 11.3% of total household income while the last one represented 42.7%.

The average income levels per household quartile and its evolution at 1973/74 prices are:

Quartis de Famílias	Concentração percentual das Receitas familiares				(%) Alterações pontuais	
	Anos	1973/74	1976	1979	1980	Entre 79/80
1º Quartil		7,3	9,2	11,4	11,3	- 0,1
2º Quartil		14,1	18,0	19,0	19,1	+ 0,1
3º Quartil		22,3	27,3	26,9	26,9	0,0
4º Quartil		56,3	45,5	42,7	42,7	0,0

In the whole, we see an increasing household purchasing power in 1973 and 1980 in every quartile except in the last one, which was affected by some post-revolution corrective measures.

In particular, between 1979 and 1980, every household quartile shows a slight improvement in purchasing power.

Gini concentration index showed in the years under analysis the following values: 0.417 in 73/74, 0.327 in 1976 and 0.278 in 1979 and 1980.

As to income dispersion, there was also a significant evolution between 1973 and 1980, evident on the following table:

Less than 18% of the families got less than 40 contos, i.e., about 450 dollars per month at the present exchange rate.

Household purchasing power improved significantly with respect to 1973/74 -- reference year before April revolution in 1974 -- although with some fluctuations resulting from a difficult world economic period and from the Portuguese economic instability in that context. In 1976, there was a substantial improvement in household income distribution and in purchasing power, but it lowered in 1979, rising again in 1980.

Evolution of Household Purchasing Power

Escalões de receita (contos)	1973/74	1976	1979	1980	Varição percentual entre 79 e 80
Menos de 5	63,4	34,2	48,4	43,1	- 11,0
5 a 9,9	25,7	40,4	40,9	42,5	+ 3,9
10 e mais	10,9	25,4	10,7	14,4	+ 35,5
Total	100	100	100	100	-

An analysis of household income concentration per household quartile shows the following distribution:

Evolution of Household Income at 1973/74 Prices

Quartis	1973/74	1976	1979	1980
1º. Quartil	1 705\$	2 680\$	2 670\$	2 880\$
2º. Quartil	3 370\$	5 330\$	4 445\$	4 915\$
3º. Quartil	5 335\$	8 150\$	6 470\$	6 925\$
4º. Quartil	13 460\$	13 670\$	10 710\$	11 050\$

4. SHELTER SECTOR CHARACTERISTICS

4.1 Settlement patterns in Portugal vary, in general, according to topography and vegetation which determine the economic and social way of living of the Portuguese people. The sea plays an important role as well.

Broadly speaking, we can say that there is a dividing line between the littoral and the inland, and between the North and the South. The North is characterized by small villages, some of them bordering the main roads; instead, in the South, mainly in Alentejo, there are few and dispersed urban settlements, and isolated housing units in correspondence with land property.

We can mention three areas in which the urbanization growth process is changing rapidly and deeply. The great Oporto and Lisbon areas (this one includes Setubal) and Faro district in the south border. In the former, the dynamic of the economic process guides the urban growth while in the latter, tourism is the basic factor, in spite of the efforts being made to preserve local characteristics.

These aspects may explain urbanization rates and, specifically, identify some of the shelter sector characteristics.

4.2 Approximately two and a half million housing units existed all over the country in 1970, but only 2.135 million were taken.

From those, over 35% were located in Lisbon and Oporto districts. As a matter of fact, regional distribution of housing stock reflected the settlement patterns and particularly the attraction that the coast and the more developed zones exerted upon inland populations, causing substantial housing densities in these regions -- almost 50% of the housing stock is in coast districts.

According to the population movements in the seventies, the housing stock fluctuations were (1970/81) of 26%, five districts having a growth rate above the continental level. One of these districts -- Setubal -- showed a growth rate of 52.4%. It is important to mention that some of the districts with the

Disbursement of Monthly Household Incomes in Relation to the Median

Quartis	1973/74		1976		1979		1980	
	Receita mensal	(a)	Receita Mensal	(a)	Receita mensal	(a)	Receita mensal	(a)
1º. Quartil	2 375\$	57,2	5 570\$	62,5	12 100\$	70,8	14 800\$	70,8
Mediana	4 150\$	100	8 915\$	100	17 100\$	100	20 900\$	100
3º. Quartil	6 660\$	160,4	13 630\$	152,9	24 100\$	140,9	29 400\$	140,6

That disbursement is still noted between 79 and 1980. The disbursement coefficient which relates the difference between the 3rd and 1st income quartiles to the median, shows the following values: 1,08 in 73/74, 0,90 in 1976 and 0,70 in 1979 and 1980.

lowest fluctuations are from Alentejo, one of them and the only one, with a negative rate (-1.8%).

As to absolute fluctuation, Lisbon has more than 34% of the total housing stock fluctuation, and OPorto 16%, these being the most significant ones.

4.3. An analysis of the present conditions of the housing stock is only possible with a general view of the 1970 Census (1981 Census data concerning these characteristics are not available).

The housing stock in 1970 was quite old. 40% of the dwellings had been built before 1920. The lifetime of the stock varies, however, from region to region. 60% of the dwellings in northern inland were built before 1920, while in the coast next to Lisbon the percentage was approximately 20% to 30%.

With respect to other characteristics, it is important to mention that more than 70% were unifamily units and that only 1% had nine or more stories.

This is another parameter of the settlement patterns of the country since uni-family units happen more often in the North.

Concerning occupancy, more than 48% of the housing stock was occupied by owners and 43% by tenants. The renting market was, with respect to the urban development process, significantly higher in the coastland, mainly in OPorto and Lisbon areas, respectively 19.4% and 31% of the total. But, taking into account the districts housing stock in 1970, more than 70% was rented in Lisbon and more than 63% in OPorto.

As far as ownership regime is concerned, the substantial extent of property in private lands contrasts with the reduced part of the park belonging to the State or to housing cooperatives. To be more precise, 95% of the housing stock is exclusively individual property.

But the rental market deserves a more detailed analysis. Since 1948, rents have been frozen in Lisbon and OPorto Municipalities. It was then expected that this measure would control inflation and help to stabilize urban living conditions. Instead, its long-term effect was the ruin or the cause for the continuous decline of the dwelling stock. In 1970, the rent average in the continent was no more than 3 dollars, and today it is not much different since the number of units that went to the rental market in the seventies was not significant. In fact, this policy has not been changed; on the contrary, it was extended all over the country in 1974. Measures adopted recently in this field didn't have time to change or to act on the market.

With respect to the building materials considered the most representative ones, the 1970 Census shows the predominancy of a stone, brick and concrete, being less common. However, the latter were predominant in the past twenty years, in particular a concrete, with a substantial increase in the last 3 decades.

In 1970, more than 57% of the housing units were built in stone, 17.5% in brick, and 10.3% in concrete, as principal building materials.

Regional habits and materials' availability are also important concerning building materials uses. For instance, after 1945, more than 60% of the dwellings built in Lisbon had concrete structures. In the sixties, stone was practically abandoned as a material in this area. In the OPorto district, after 1960 stone was used in 40% of the cases, followed by brick (about 25%) and concrete (less than 20%). However, in inland, mainly in the North, stone continued being used and in some cases concrete structures didn't reach 5% of the total.

Besides these characteristics, it is also important to relate building materials uses with building technology which is, on the average, traditional.

In what concerns domestic fittings, in 1970 they were quite insufficient: 35% of the housing units were not provided with electricity; 53% were not equipped with water supply systems and 43% did not have a private water closet. These global values involve important regional differences which mean more favorable conditions for the large population centers and a greater precarious situation in inland regions, namely in the north of the country and in particular in Oporto district.

In 1977 the situation changed, although the numbers still show high levels of housing units without services -- 48% did not have water supply systems and 39% did not have private water closets. In this last case, it is important to notice that only 50% of the housing units were connected to sewerage systems.

This situation reflects the settlement patterns of the country since it is very difficult to provide each unit with these domestic fittings, or public systems, if they are spread throughout the country.

In spite of this, public expenditures regarding water and sewerage systems increased 394.6% between 1976 and 1980 and in the latter the expenditure amounted to more than 160,000 dollars.*

Water consumption average was very low in 1977, only $26.04\text{m}^3/\text{inhabitant}$ per year, with the exception of Faro (41.09m^3), Setubal (42.53m^3) and Lisbon (56.25m^3) districts. The first one, because of the tourist consumption, the second one, for industrial consumption and the third one, for urban and industrial consumptions.

4.4. In order to understand housing demand and housing needs, we have to consider some forecasts for 1971/80, taking into account lodging conditions in 1970 and probable population growth (normal growth and people from the ex-colonies).

* 1 dollar = 90\$00 (October 1982)

For 1971/1980, housing needs were estimated to be 645030 units but the market and institutional characteristics did not support it.

In fact, in 1974 and in 1975/76, there was a considerable fall in the building rate owing to political changes, taking into account that the crisis had already begun in 1973 with the rise in oil prices.

Statistically speaking, the number of new units built was 35,309 in 1971, 42,508 in 1974 and, respectively, 31,172 and 29,290 in 1975 and 1976, affecting both private and public promoters. And, after a period of stabilization, there has not been a recovery to former levels since in 1980 the number of new units built was 36,811.

Comparing these building rates with other European countries for the period of 1971/74 and 1975/79, we see that in our country we have reached 5.0 and 3.7 units per 1,000 inhabitants while Greece had 16.1 and 14.8, Spain 9.8 and 9.3, etc., and only Italy seemed to be inferior to Portugal with 4.6 and 3.1.

The same happened in the relation between GFCF in housing and the GDP for the same period. Portugal 3.2% in both, Greece 6.9% and 6.8%, Spain 5.2% and 6.1%, etc. but Italy showed 6.0% and 5.3%.

Having in mind the situation of the rental market and the remarks made on it, this market almost disappeared after 1974. In general, the quotient between building costs and rents in the center of Lisbon shows that after 1977 the profitability of the rental market is negative (80% to 99%); the latter in 1981 when some measures were taken in this field).

In 1977, an important credit instrument was established to support the owner's purchasing market. This system is also one of the factors that has contributed to a change in the market, since the most important sector of the new units built each year will be addressed to owners.

After this picture of the evolution of the housing sector in the seventies, it is easy to understand that people will try to find other alternative solutions for their shelter problems, for instance, illegal developments and buildings, self-building solutions, etc.

In 1977, a forecast of the illegal dwellings existing in Portugal showed near 100,000 units, most of them in coastal land, mainly in the suburbs of the most important urban centers or even in vacant lots or spaces of the cities, generally conflict zones in what regards administrative limits or real estate property.

Although old rents are low and do not correspond to the value of the shelter services offered, the levels of the new rents established in new contracts, mainly after 1974, are very high and most families cannot afford them.

For example, the average rent price in the city of Lisbon in 1968, was more than 48% of the household average income for a three-room unit. And in spite of the growth detected in this last parameter, the value was, in 1980, more than 32%. If we take a four-room apartment, the values were 72% in 1968 and more than 58% in 1980.

Comparing the average rent for the same kind of apartment to the national minimum wage established only in 1974, we have then more than 113% and 157% respectively and more than 111% and 134% in 1981.

As we have noticed, most of the units built each year will be purchased for owner occupancy. As a matter of fact, the number of contracts rose from 11,888 in 1976 to 48,921 in 1981, but there was also a rise in the total amount of granted credit, from more than US \$44,500,000 to more than US \$531,100,000, not only because of the increase in contracts but also because the average of the contracts rose more or less three times between 1976 and 1981.

This situation was due not only to State Budget subsidies but to supply shortages as well as to the total disruption of the rental market. But it

was, until 1981, the most efficient instrument of housing policy besides the efforts carried out in the public housing promotion area.

For instance, the total subsidies granted to households under this credit system amounted to more than US \$186,000 in 1976 and to more than US \$94,700,000 in 1981.

Besides this, only few households could afford a credit loan comparing the income distribution to the housing costs.

In fact, we can say that the average cost of an apartment (prices in January of 1982) represents about 7 to 9 years of household income average. If we do not consider the financial cost of the capital, and assume a 20% maximum level shelter expenditure of the household income, more than 35 years would be needed to pay for an apartment.

Taking into account some forecasts on household income distribution in 1981 and the acceptable maximum levels of shelter expenditure, the results would be:

- 11.1% of the households could spend US \$13;
- 21.5%, US \$33;
- 21.1% between \$33 and US \$60;
- 29.9% between \$60 and US \$112;
- 16.5% of the households could spend more than US \$112.

Considering the present credit, as well as the above-mentioned shelter expenditures, it is possible to conclude that the owner purchasing market is above the means and possibilities of 55% of the households.

Although more detailed information about the characteristics of the existing housing stock in 1981 is not available, efforts have been made in order to give an idea about the qualitative situation of housing needs.

Housing needs at a continental level are of 52,223 units, that is 1.9% of the number of existing families. Obviously, regional distribution differences according to economic, social and correlated urban processes are visible.

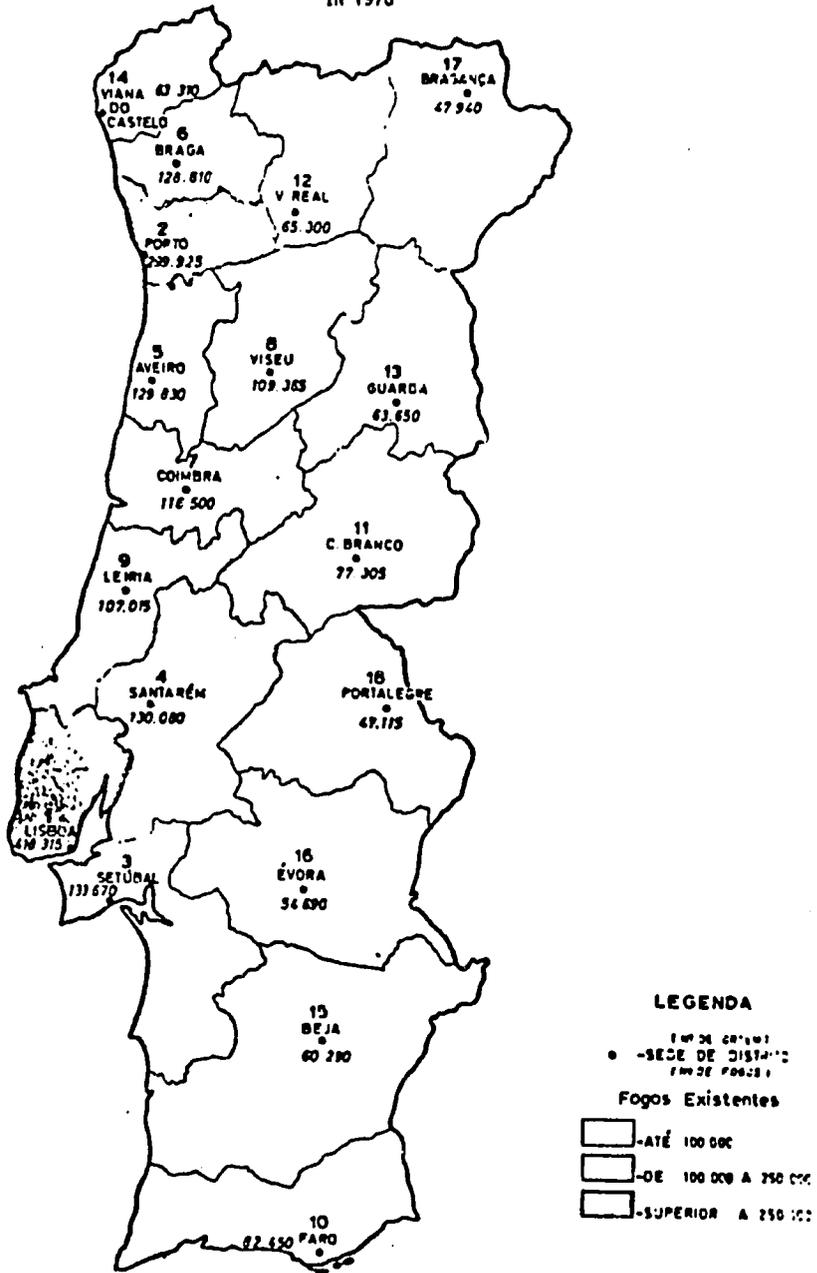
For instance, in Evora, absolute needs are more or less 9% of the existing families, in Beja 6.1%, in Braganca 5.8%, Viseu 5.1%, etc., in Lisbon 1.2% and Oporto 1.5%.

As it has been mentioned, other important data did not enable a more detailed and clear perspective of the Housing Stock and this is important just because some of the characteristics (mainly, overcrowded units, subrenting, etc.) are determinant. In fact, these were some of the alternatives used to solve housing offer shortages in the seventies.

HOUSING UNITS ACCORDING TO OWNER INSTITUTIONS
IN THE CONTINENT, 1970

ENTIDADE PROPRIETÁRIA		Nº FOGOS EM 1970	%
ESTADO, AUTARQUIAS LO- CAIS E ORGANISMOS SEMI- -PÚBLICOS	ESTADO E AUTARQUIAS	29 325	1,4
	ORGANISMOS SEMI-PÚBLICOS	17 385	0,8
COOPERATIVAS DE HABITAÇÃO		4 155	0,2
PROPRIEDADE PRIVADA	ORGANISMOS PRIVADOS	55 660	2,6
	PARTICULARES	2 028 835	95,0
T O T A L		2 135 360	100,0

OCCUPIED UNITS
 DISTRIBUTION ACCORDING TO DISTRICTS OF THE EXISTENT STOCK
 IN 1970



REGIONAL DISTRIBUTION OF HOUSING STOCK, 1970

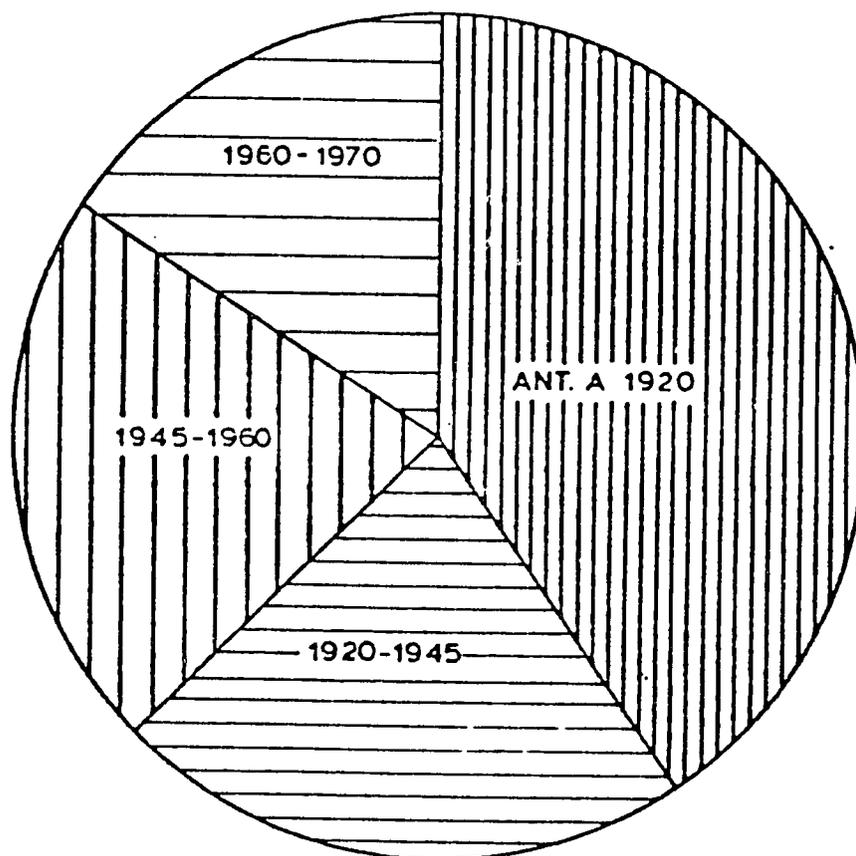
ALOJAM CLÁSSICOS EM 1970	DISTRITOS	DISTRIBUIÇÃO PERCENTUAL									
		2	4	6	8	10	12	14	16	18	20
145 950	AVEIRO	[Bar chart showing percentage distribution]									
80 075	BEJA	[Bar chart showing percentage distribution]									
145 515	BRAGA	[Bar chart showing percentage distribution]									
63 005	BRAGANCA	[Bar chart showing percentage distribution]									
101 995	CASTELO BRANCO	[Bar chart showing percentage distribution]									
141 670	COIMBRA	[Bar chart showing percentage distribution]									
70 105	ÉVORA	[Bar chart showing percentage distribution]									
105 300	FARO	[Bar chart showing percentage distribution]									
89 205	GUAROA	[Bar chart showing percentage distribution]									
131 335	LEIRIA	[Bar chart showing percentage distribution]									
476 725	LISBOA	[Bar chart showing percentage distribution]									
61 620	PORTALEGRE	[Bar chart showing percentage distribution]									
327 500	PORTO	[Bar chart showing percentage distribution]									
157 465	SANTARÉM	[Bar chart showing percentage distribution]									
158 070	SETÚBAL	[Bar chart showing percentage distribution]									
77 235	VIANA DO CASTELO	[Bar chart showing percentage distribution]									
90 905	VILA REAL	[Bar chart showing percentage distribution]									
145 070	UISEU	[Bar chart showing percentage distribution]									
2 558 745	CONTINENTE	[Bar chart showing percentage distribution]									

INCREASES IN NUMBER OF HOUSING UNITS IN
1970/81

Distritos	Acréscimo dos alojamentos recenseados entre 70 e 81
Lisboa	+ 229 913
Porto	+ 112 838
Setúbal	+ 84 679
Braga	+ 44 453
Aveiro	+ 38 424
Faro	+ 33 351
Leiria	+ 31 970
Coimbra	+ 22 449
Santarém	+ 16 069
V. Castelo	+ 13 130
Vila Real	+ 11 325
Viseu	+ 8 703
Bragança	+ 7 114
Guarda	+ 6 118
Évora	+ 5 236
C. Branco	+ 4 624
Portalegre	+ 3 960
Beja	- 1 461
Continente	+ 672 895

Distritos	Acréscimo relativo entre 70 e 81
Setúbal	+ 52,4
Lisboa	+ 47,4
Porto	+ 34,9
Faro	+ 31,2
Braga	+ 30,3
Continente	+ 26,0
Aveiro	+ 26,0
Leiria	+ 24,2
V. Castelö	+ 16,8
Coimbra	+ 15,7
Vila Real	+ 13,7
Bragança	+ 11,2
Santarém	+ 10,1
Évora	+ 7,4
Guarda	+ 6,8
Portalegre	+ 6,4
Viseu	+ 5,9
C. Branco	+ 4,5
Beja	- 1,8

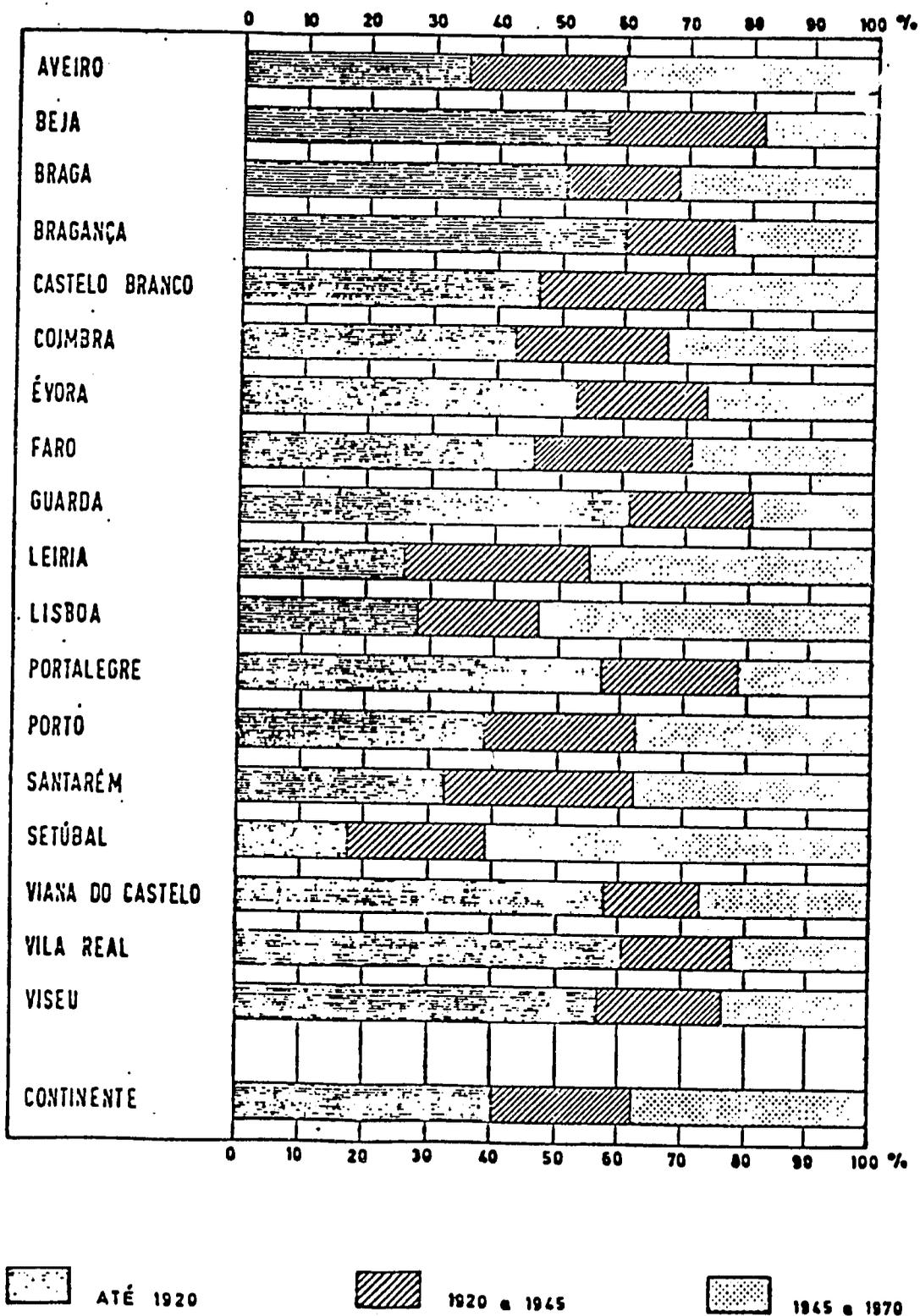
TYPICAL UNITS OCCUPIED
GLOBAL VALUES BY CONSTRUCTION PERIODS



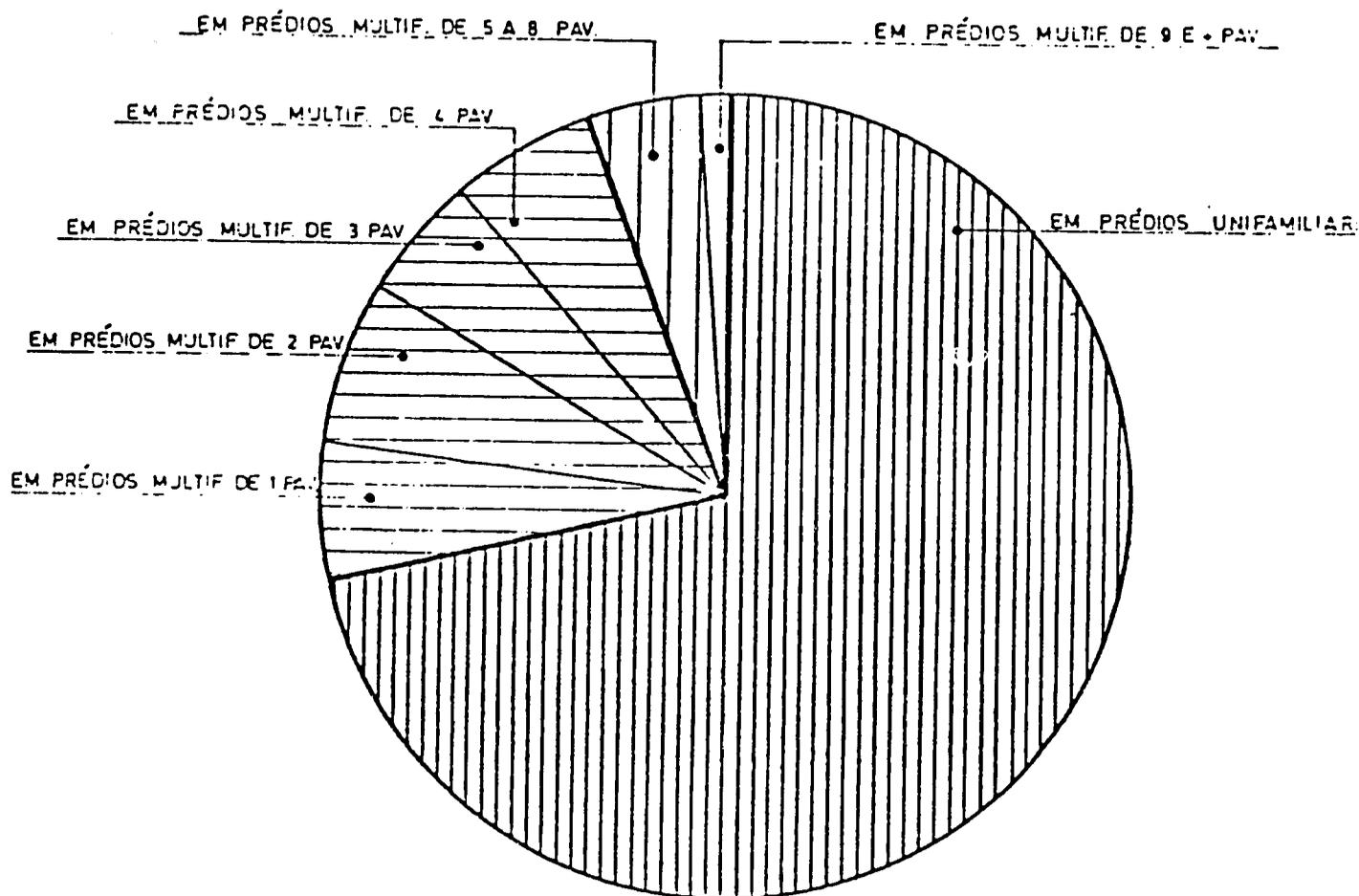
Períodos Continente	Anteriores a 1920	DE 1920 a 1945	DE 1945 a 1960	DE 1960 a 1970	TOTAL
Valores Absolutos	860 565	470 550	459 215	345 030	2 135 360
Porcentagens (%)	40,3	22	21,5	16,1	100

Fonte I Recenseamento da Habitação 1970

HOUSING UNITS IN THE CONTINENTAL ACCORDING TO
CONSTRUCTION AGE - 1970



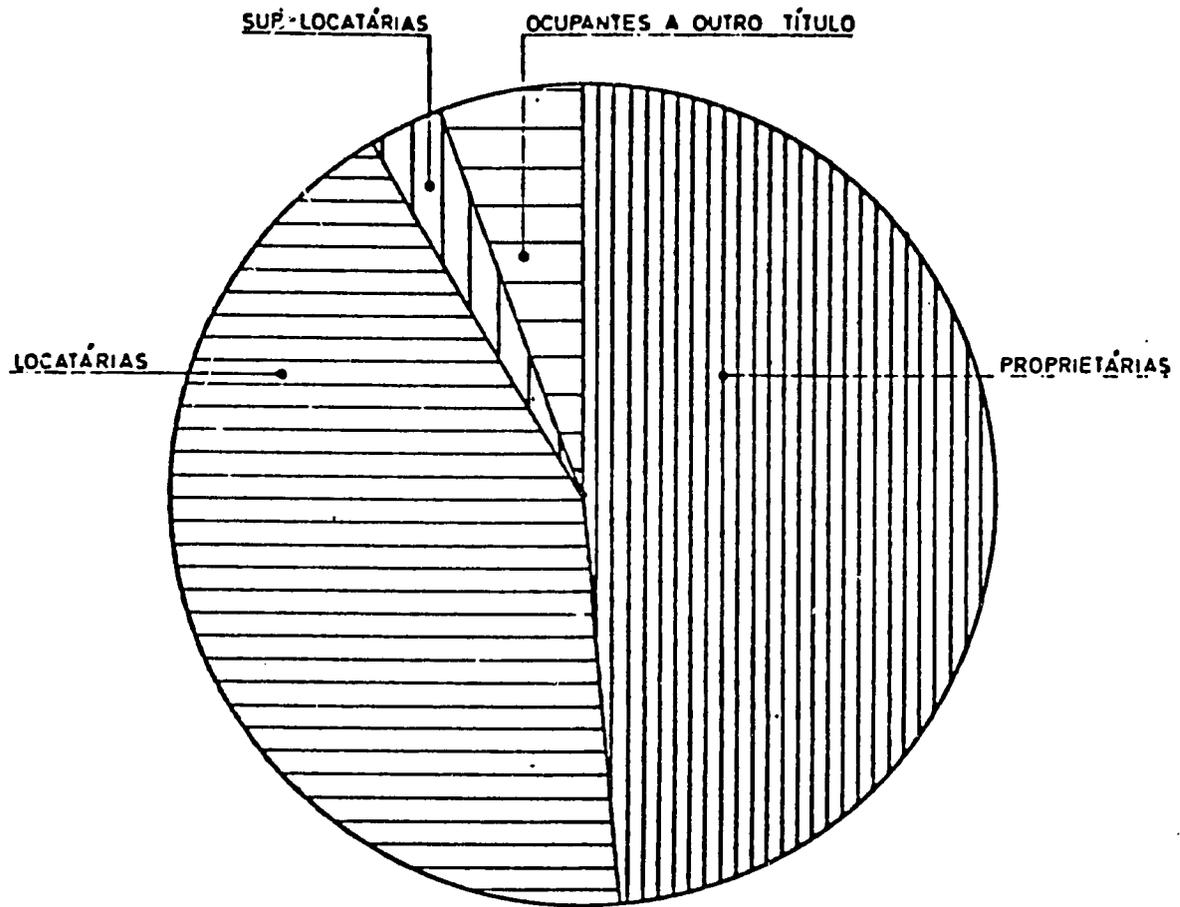
EXISTENT STOCK IN 1970 ACCORDING TO A TYPOLOGY OF BUILDINGS -- GLOBAL VALUES



Tipologias	Prédios	Prédios Multifamiliares						Total
		De 1 Pavimento	De 2 Pavimentos	De 3 Pavimentos	De 4 Pavimentos	De 5 a 8 Pavimentos	De 9 e + Pavimentos	
Contingente	Unifamiliares							
Valores Absolutos	1.531.135	118.845	143.350	104.200	121.155	85.900	20.775	2.135.360
Percentagens (%)	71,7	5,5	6,7	4,9	5,7	4,5	1	100

Fonte: I Recenseamento da Habitação 1970

FAMILIES ACCORDING TO FORMS OF HOUSING
OCCUPATION IN 1970



Formas de Ocupa. Continente	Proprietárias	Locatárias	Sub-Localárias	Ocupantes a Outro Título	Total
Valores Absolutos	1 056 455	938 850	66 175	121 555	2 183 035
Percentagens (%)	48,4	43	3	5,6	100

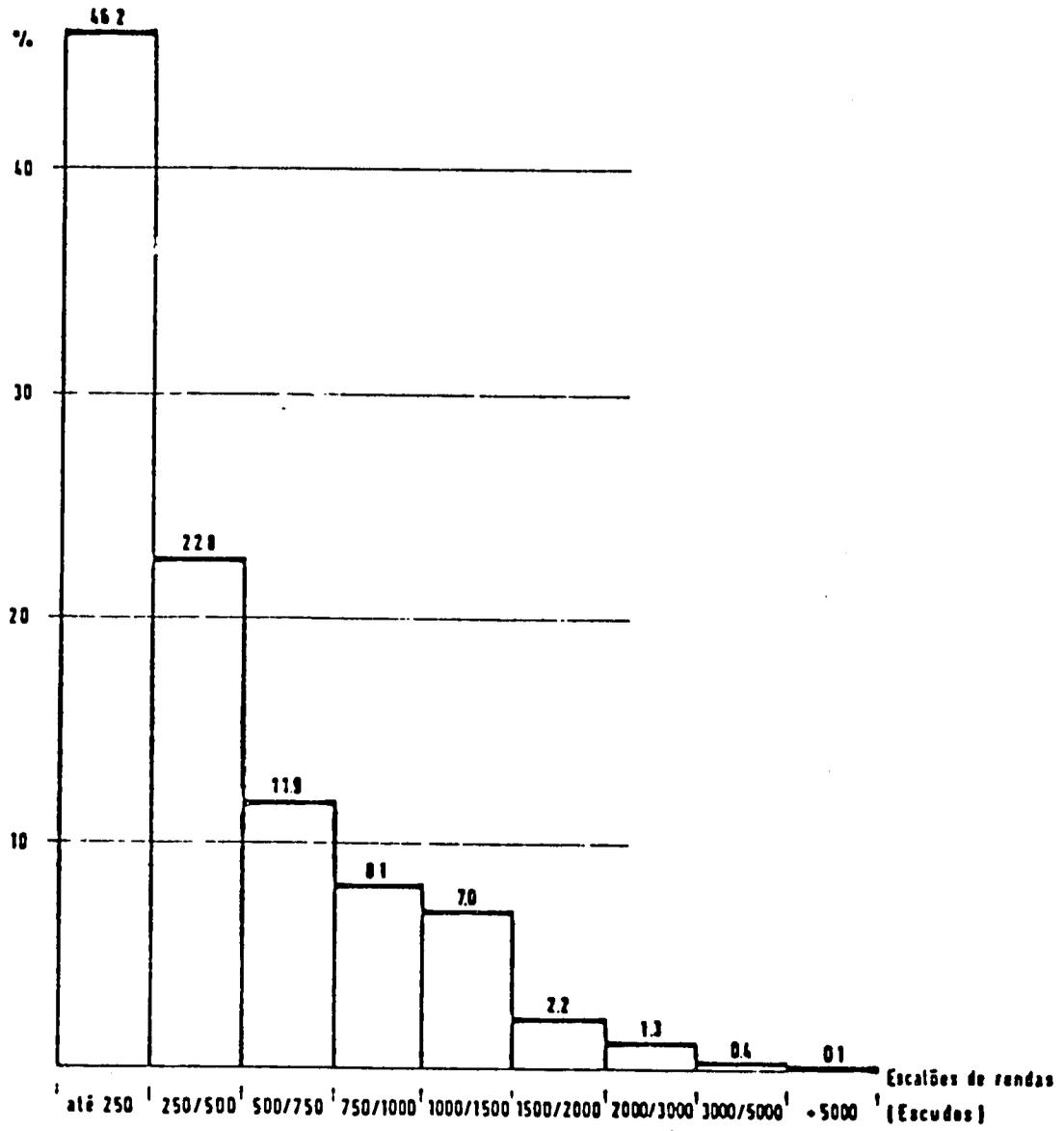
Fonte: I Recenseamento da Habitação, 1970

STRUCTURE OF DISTRICT DISTRIBUTION OF UNITS IN THE
CONTINENT USED AS FOR RENTAL UNITS -- 1970

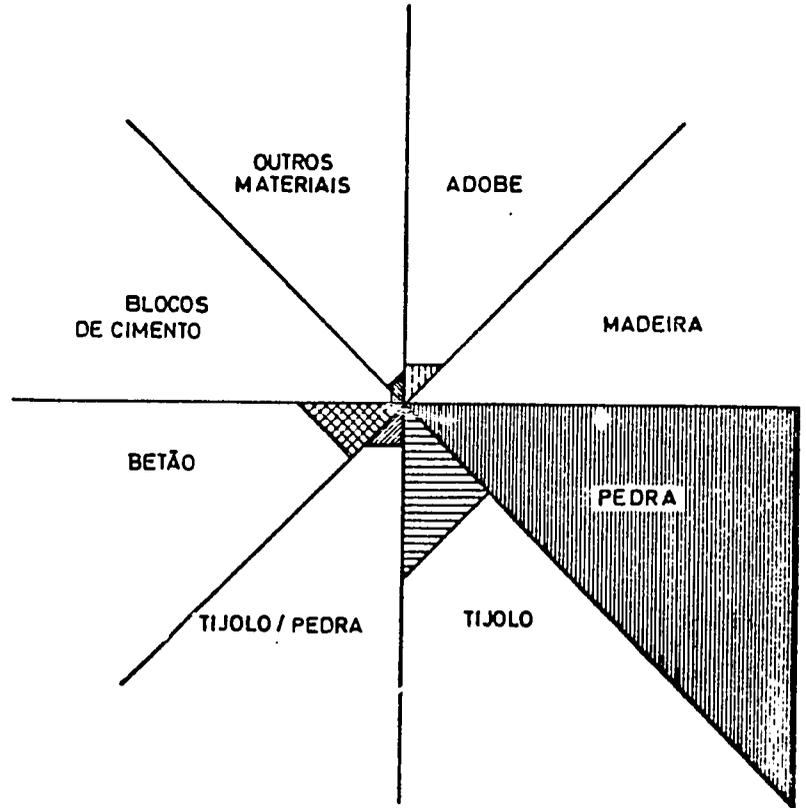
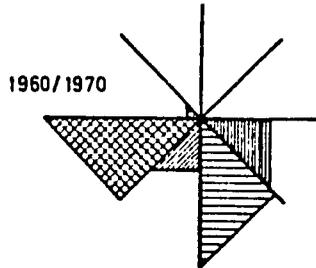
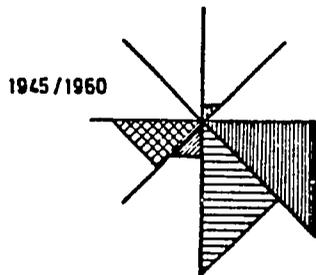
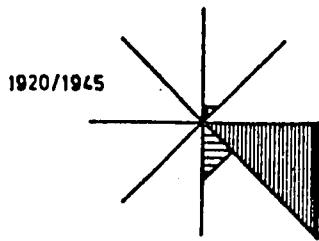
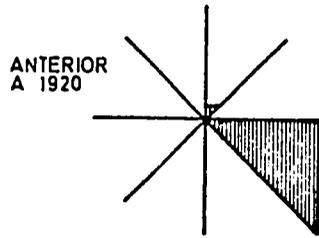
NÚMERO	DISTRITOS	DISTRIBUIÇÃO PERCENTUAL													
		2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
45 260	AVEIRO	[Bar chart showing distribution for Aveiro]													
24 125	BEJA	[Bar chart showing distribution for Beja]													
61 795	BRAGA	[Bar chart showing distribution for Braga]													
9 335	BRAGANÇA	[Bar chart showing distribution for Bragança]													
24 075	CASTELO BRANCO	[Bar chart showing distribution for Castelo Branco]													
32 690	COIMBRA	[Bar chart showing distribution for Coimbra]													
34 955	ÉVORA	[Bar chart showing distribution for Évora]													
35 045	FARO	[Bar chart showing distribution for Faro]													
17 620	GUARDA	[Bar chart showing distribution for Guarda]													
26 790	LEIRIA	[Bar chart showing distribution for Leiria]													
333 605	LISBOA	[Bar chart showing distribution for Lisboa]													
24 955	PORTALEGRE	[Bar chart showing distribution for Portalegre]													
208 197	PORTO	[Bar chart showing distribution for Porto]													
42 825	SANTARÉM	[Bar chart showing distribution for Santarém]													
99 445	SETÚBAL	[Bar chart showing distribution for Setúbal]													
13 815	VIANA DO CASTELO	[Bar chart showing distribution for Viana do Castelo]													
13 020	VILA REAL	[Bar chart showing distribution for Vila Real]													
25 990	VISEU	[Bar chart showing distribution for Viseu]													
1 073 612	CONTINENTE	[Bar chart showing distribution for the Continent]													

* inclui fogos ocupados e fogos vagos

RENTAL UNITS IN THE CONTINENT -- 1970
RENTAL DISTRIBUTION

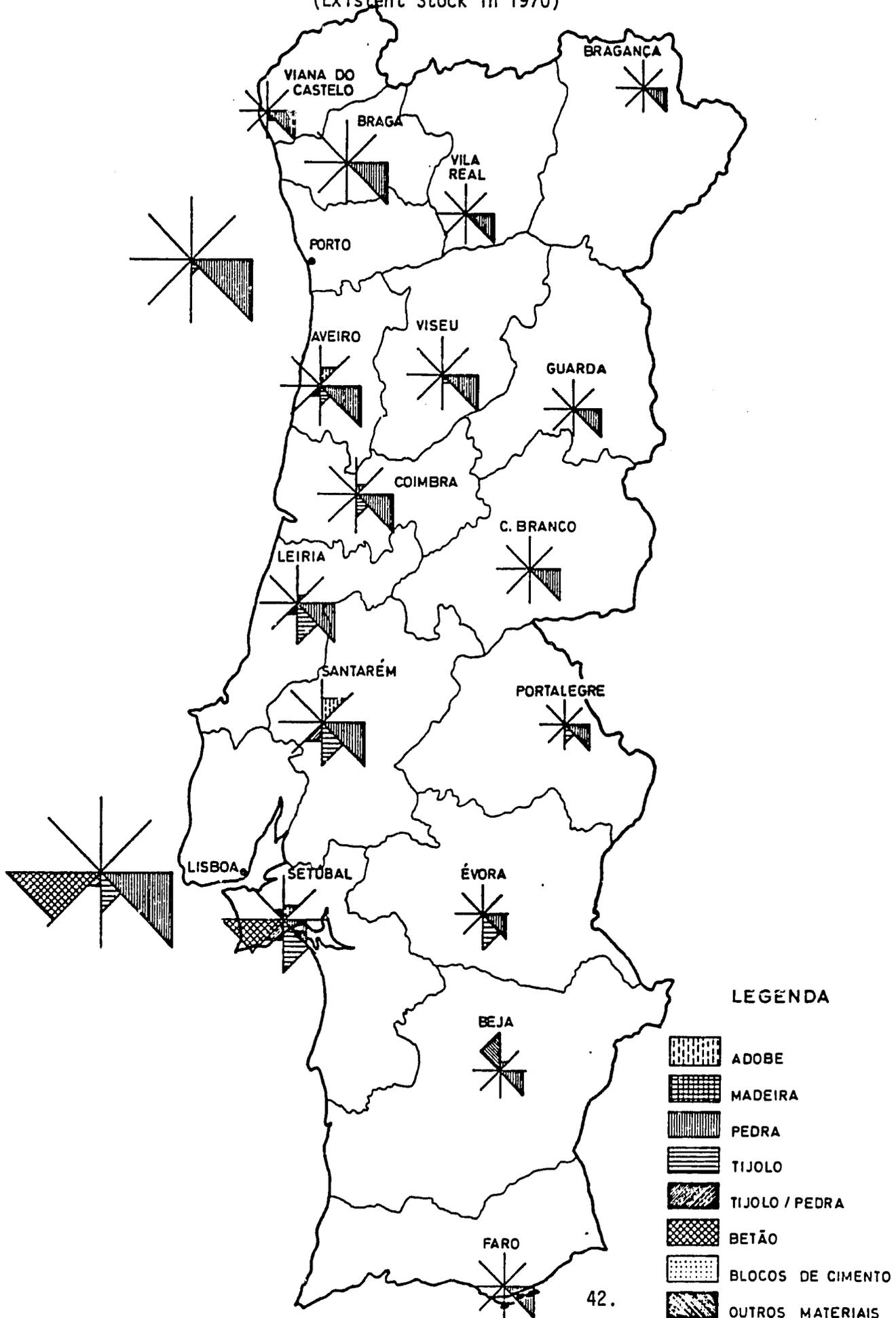


MAIN CONSTRUCTION MATERIALS OF RESISTENT ELEMENTS -- GLOBAL VALUES
AND BY CONSTRUCTION PERIODS

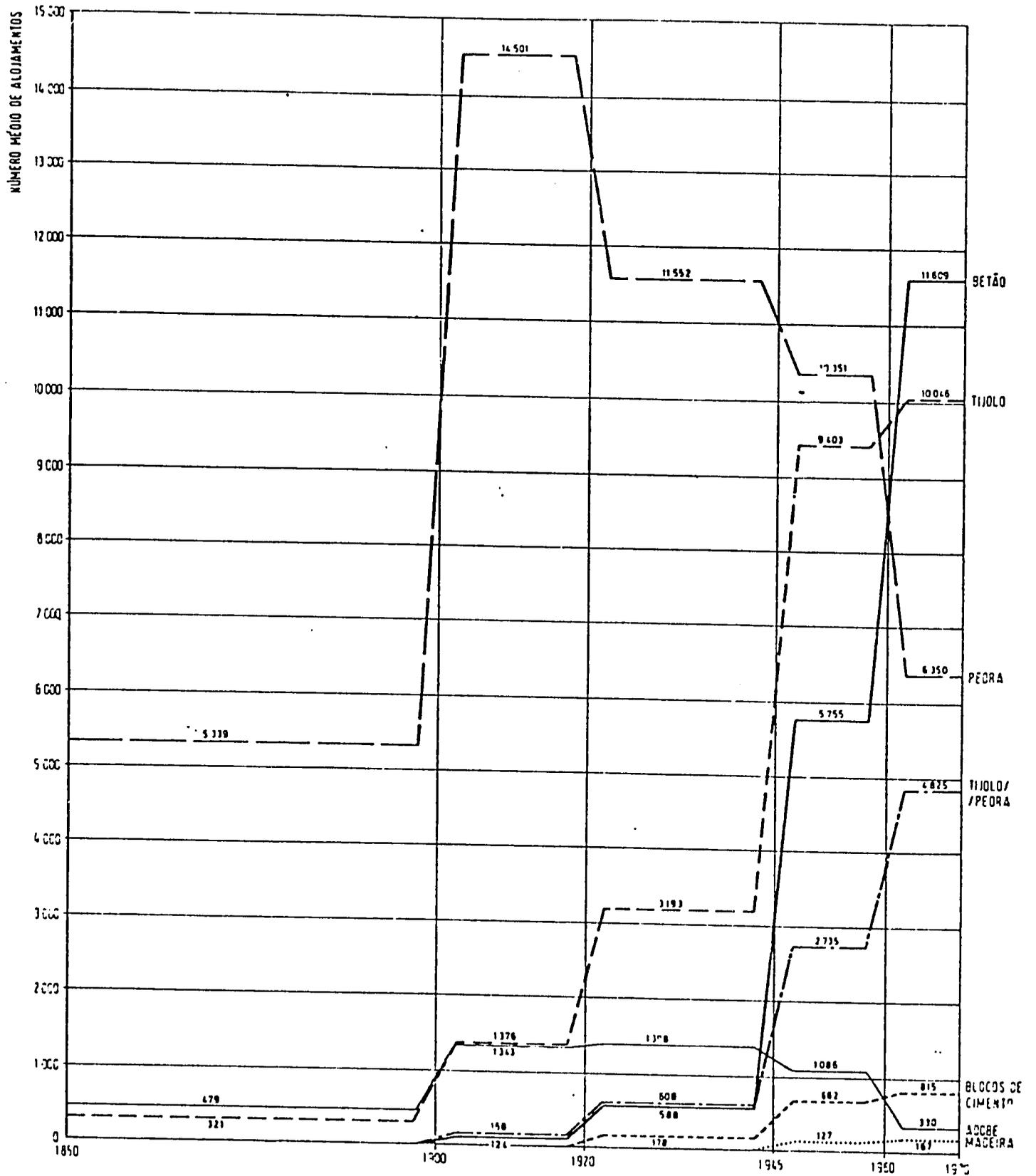


MATERIAIS PERÍODOS	ADOBE	MADEIRA	PEDRA	TIJOLO	TIJOLO PEDRA	BETÃO	BLOCOS DE CIMENTO	OUTROS MATERIAIS	TOTAL
ANTERIOR A 1920	61 420	4 405	707 115	50 060	5 285	3 375	870	28 035	860 565
1920/1945	36 340	2 020	300 345	83 030	15 805	15 285	4 630	13 095	470 550
1945/1960	16 285	1 905	155 260	141 040	41 020	86 325	9 930	7 450	459 215
1960/1970	3 295	1 670	63 500	100 455	48 250	116 090	8 145	3 625	345 030
TOTAIS	117 340	10 000	1 226 220	374 585	110 360	221 075	23 575	52 205	2 135 360

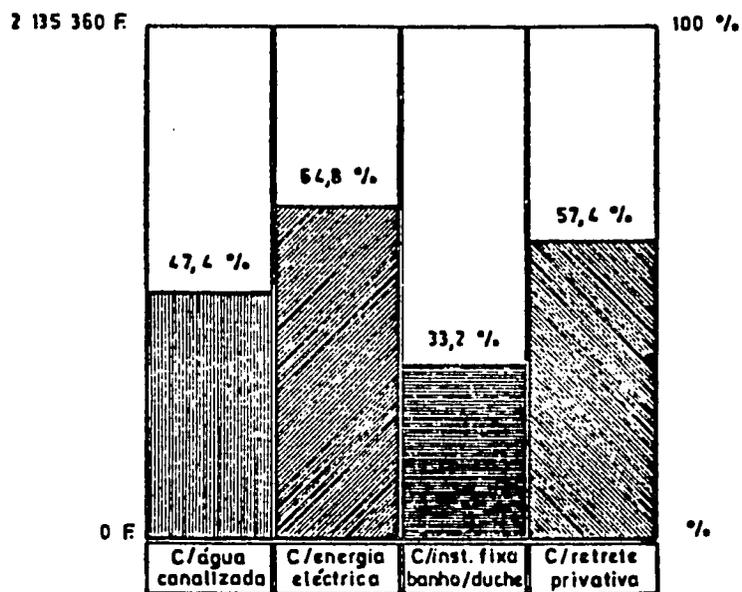
MAIN CONSTRUCTION ELEMENTS OF RESISTANT ELEMENTS
(Existent Stock in 1970)



MAIN MATERIALS USED IN CONSTRUCTION AS RESISTANT ELEMENTS

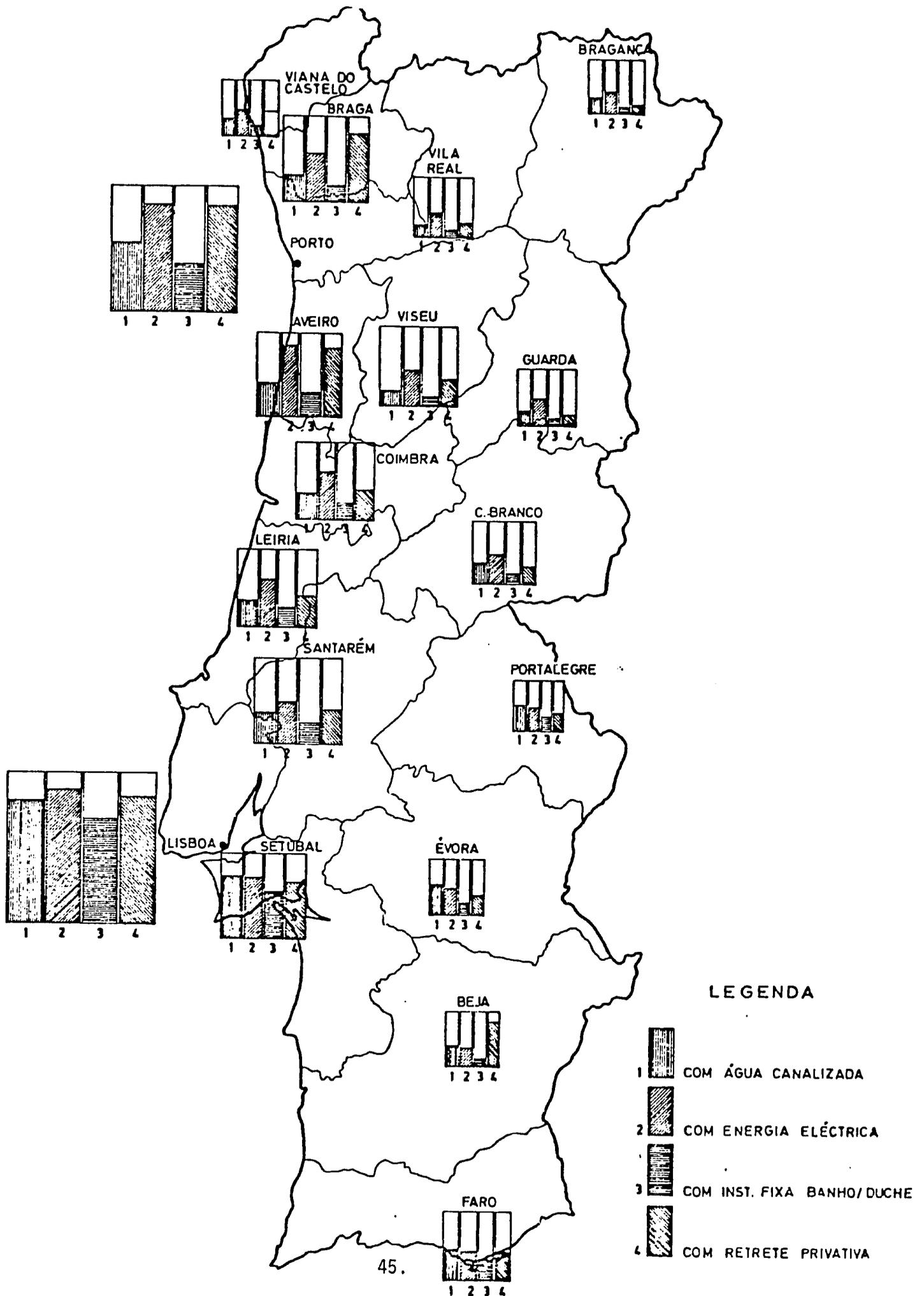


SERVICES
(EXISTING STOCK IN 1970)



Equipamento Continente	Com água canalizada	Com energia eléctrica	Com inst. fixa banho / duche	Com retrete privativa	Total
Valores Absolutos	1 013 050	1 383 115	708 115	1 226 095	2 135 360
Percentagens (%)	47,4	64,8	33,2	57,4	100

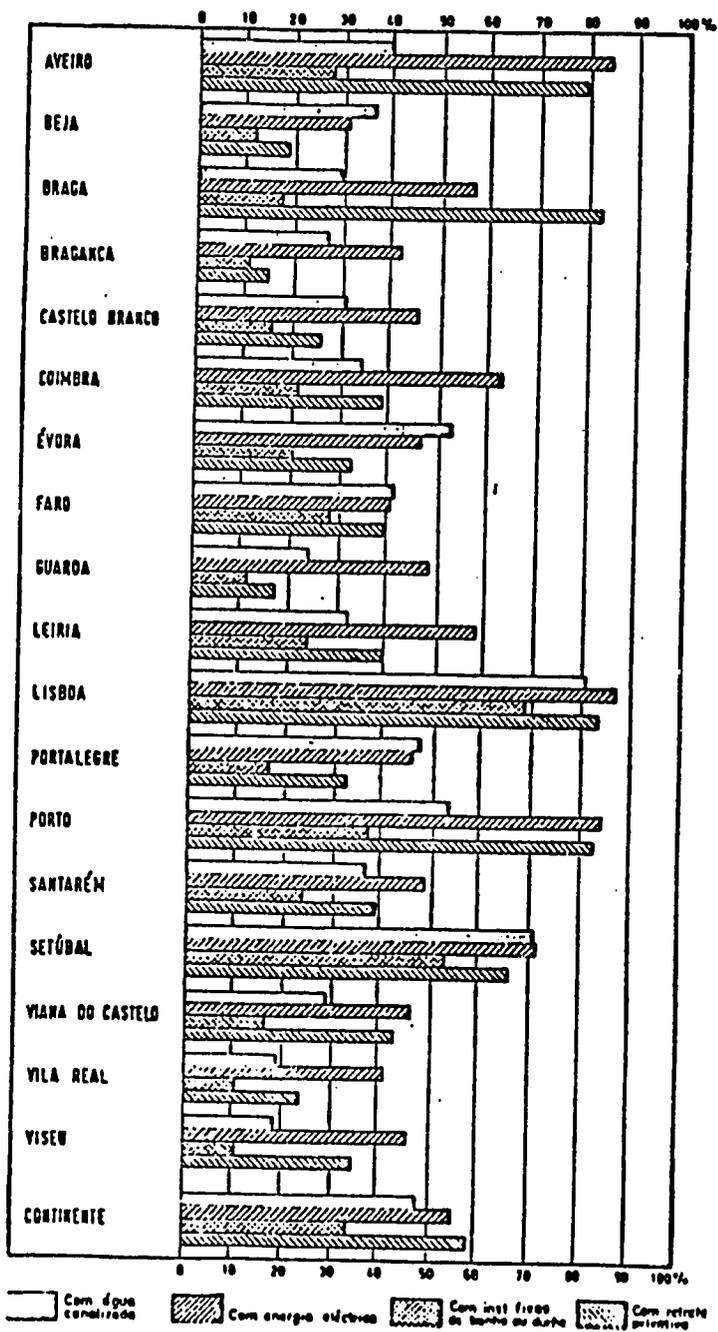
DISTRIBUTION OF SERVICES (1970)



LEGENDA

- 1 COM ÁGUA CANALIZADA
- 2 COM ENERGIA ELÉCTRICA
- 3 COM INST. FIXA BANHO/DUCHE
- 4 COM RETRETE PRIVATIVA

SERVICES (1970).



REGIONAL STRUCTURE OF WATER AND SEWERAGE DEFICIENCIES -- 1970

- 1970 -

DESIGNAÇÃO DISTRITOS	POPULAÇÃO		HABITAÇÃO	
	sem água (1)	sem esgotos (2)	sem água (1)	sem esgotos (2)
Aveiro	7,7	7,4	7,1	6,6
Beja	3,0	3,9	3,4	4,3
Braga	9,9	7,6	8,1	6,2
Bragança	3,0	3,7	3,1	3,6
Castelo Branco	4,0	4,4	4,7	5,1
Coimbra	6,0	6,5	6,8	7,1
Évora	2,0	2,8	2,3	3,3
Faro	3,6	3,9	4,3	4,6
Guarda	3,7	4,1	4,3	4,7
Leiria	6,0	5,8	6,5	6,2
Lisboa	7,9	7,2	7,1	6,6
Portalegre	1,8	2,3	2,2	2,8
Porto	15,0	12,8	12,5	10,8
Santarém	6,3	6,5	7,4	7,4
Setúbal	3,2	3,8	3,5	4,1
Viana do Castelo	4,1	4,4	4,0	4,1
Vila Real	5,0	5,3	4,7	4,9
Viseu	7,8	7,6	7,3	7,5
CONTINENTE	100,0	100,0	100,0	100,0
Número	4 260 585	4 242 600	1 122 310	1 146 995

(1)- Refere-se a água canalizada no domicílio.

(2)- Incluíram-se, para além dos alojamentos sem retrete privativa, aqueles cuja retrete se encontrava ligada a "Outro sistema de esgotos".

FONTE: I Recenseamento da Habitação - INE, 1970.

WATER PROVISIONS -- 1977

DISTRITOS	COM ABASTECIMENTO DOMICILIÁRIO			(%)
	Proveniente de canalização		TOTAL	SEM ABASTECIMENTO DOMICILIÁRIO
	Público	Particular		
Aveiro	17	27	44	56
Beja	24	13	37	63
Braga	17	19	36	64
Bragança	22	7	29	71
Castelo Branco	25	9	34	66
Coimbra	25	13	38	62
Évora	40	14	54	46
Faro	42	8	50	50
Guarda	21	6	27	73
Leiria	21	17	38	62
Lisboa	76	7	83	17
Portalegre	42	8	50	50
Porto	39	18	57	43
Santarém	28	12	40	60
Setúbal	70	6	76	24
Viana do Castelo	16	17	33	67
Vila Real	16	6	22	78
Viseu	12	10	22	78
CONTINENTE	40	12	52	48

FONTE: Estimativa do GPC/HOF.

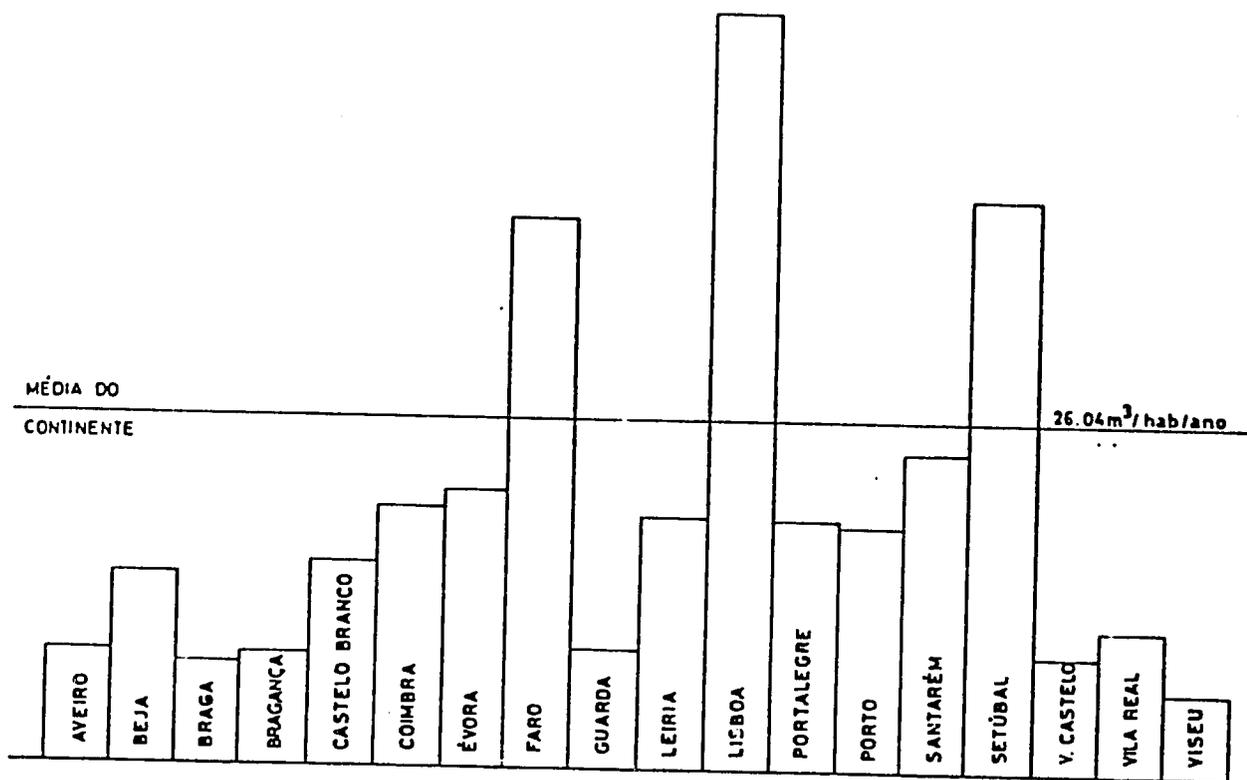
SEWERAGE -- 1977

- 1977 -

DISTRITOS	ALOJAMENTOS COM RETRETE PRIVATIVA			TOTAL	ALOJAMENTOS SEM RETRETE PRIVATIVA
	Ligada a um sistema de esgoto				
	Público	Particular	Outro		
Aveiro	10	33	37	80	20
Beja	17	2	1	20	80
Braga	10	36	37	83	17
Bragança	10	6	2	18	82
Castelo Branco	18	9	2	29	71
Coimbra	14	19	10	43	57
Évora	30	4	1	35	65
Faro	34	10	4	48	52
Guarda	10	9	2	21	79
Leiria	15	24	6	45	55
Lisboa	75	9	2	86	14
Portalegre	28	6	1	35	65
Porto	27	33	24	84	16
Santarém	19	20	4	43	57
Setúbal	62	10	1	73	27
Viana do Castelo	9	19	18	46	54
Vila Real	7	8	11	26	74
Viseu	7	15	15	37	63
CONTINENTE	32	18	11	61	39

FONTE: Estimativa do GPC/HOF.

WATER CONSUMPTION (1977)



DISTRICTO	CAPITAÇÃO	DISTRICTO	CAPITAÇÃO
AVEIRO	8.45	LEIRIA	18.64
BEJA	14.32	LISBOA	56.25
BRAGA	8.17	PORTALEGRE	18.49
BRAGANÇA	8.37	PORTO	18.27
CASTELO BRANCO	15.04	SANTARÉM	23.96
COIMBRA	19.35	SETÚBAL	42.53
EVORA	20.58	VIANA DO CASTELO	8.43
FARO	41.09	VILA REAL	10.40
GUARDA	8.80	UISEU	6.00

FONTES: Estatísticas Industriais, INF
 Estimativas da população, DCP

CAPITAL INVESTMENT IN BASIC INFRASTRUCTURE
(Current Prices)

DESIGNAÇÃO	1976	1977	1978	1979	1980
INVESTIMENTO TOTAL	<u>3 700,0</u>	<u>5 400,0</u>	<u>6.400,0</u>	<u>10.700,0</u>	<u>14.600,0</u>
Dotações da Administração Central *	3 700,0	5 400,0	6.400,0	1 200,0	2.300,0
Receitas das Autarquias Locais **	-	-	-	9 500,0	12.300,0

* Inclui participações da DGERU, DGSB, JAE, GGFD e dotação para verbas livres do MAI

** Estimativa da aplicação das receitas das Autarquias em infraestruturas básicas.

HOUSING NEEDS IN 1971/80 AND DEFICIENT HOUSING (1970)

DISTRITO	Estimativa das necessidades de habitação no período 1971/80		Famílias mal alojadas em 1970	
	Nº. de Fogos	%	Número	% relativamente ao número Total de Famílias do distrito
Aveiro	28 990	4,5	34 415	26,1
Beja	10 681	1,7	17 670	28,5
Braga	30 501	4,7	54 025	41,3
Bragança	9 259	1,4	15 705	32,4
C. Branco	15 445	2,4	16 475	21,1
Coimbra	24 256	3,8	21 910	18,6
Évora	10 357	1,6	16 175	29,0
Faro	13 812	2,1	17,230	20,2
Guarda	12 338	1,9	16 170	25,2
Leiria	22 209	3,4	21 325	19,7
Lisboa	229 794	35,6	145 405	31,1
Portalegre	8 796	1,4	10 950	22,9
Porto	87 595	13,6	116 685	37,5
Santarém	27 266	4,2	24 935	18,8
Setúbal	68 747	10,7	40 050	28,5
V. Castelo	11 918	1,8	20 630	32,2
Vila Real	12 050	1,9	30 225	45,3
Viseu	21 016	3,3	33 280	30,1
Continente	645 030	100,0	653 260	29,4

SITUAÇÕES DE MAU ALOJAMENTO EM 1970

Famílias vivendo em alojamento sem ser fogo	Famílias vivendo em regime de sub-locação	Famílias vivendo em fogos sobre-lotados	Total de famílias mal alojadas
34 740	66 175	552 345	653 260
5,3%	10,1%	84,6%	100,0%

EVOLUTION OF UNITS ACCORDING TO TYPE OF DEVELOPER

Promotor	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Sector público ^(a)										
e semi-público	3 424	4 683	4 557	2 223	2 166	1 965	5 813	4 152	4 933	5 640
Cooperativas	143	252	230	249	222	151	148	77	140	480
Sector privado	31 742	34 595	36 529	40 108	28 784	27 174	27 887	28 859	29 976	30 691
Total	35 309	39 530	41 316	42 580	31 172	29 290	33 848	33 088	35 239	36 811

(a) Inclui organismos semi-públicos e empresas públicas

EVOLUTION OF UNITS ACCORDING TO TYPE OF DEVELOPER -- %

Promotores	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Sector público	9,7	11,9	11,0	5,2	7,0	6,7	17,2	12,5	14,0	15,3
Cooperativas	0,4	0,6	0,6	0,6	0,7	0,5	0,4	0,3	0,4	1,3
Sector privado	89,9	87,5	88,4	94,2	92,3	92,8	82,4	87,2	85,6	83,4

RATE OF CONSTRUCTION UNITS COMPLETED
PER 1,000 INHABITANTS

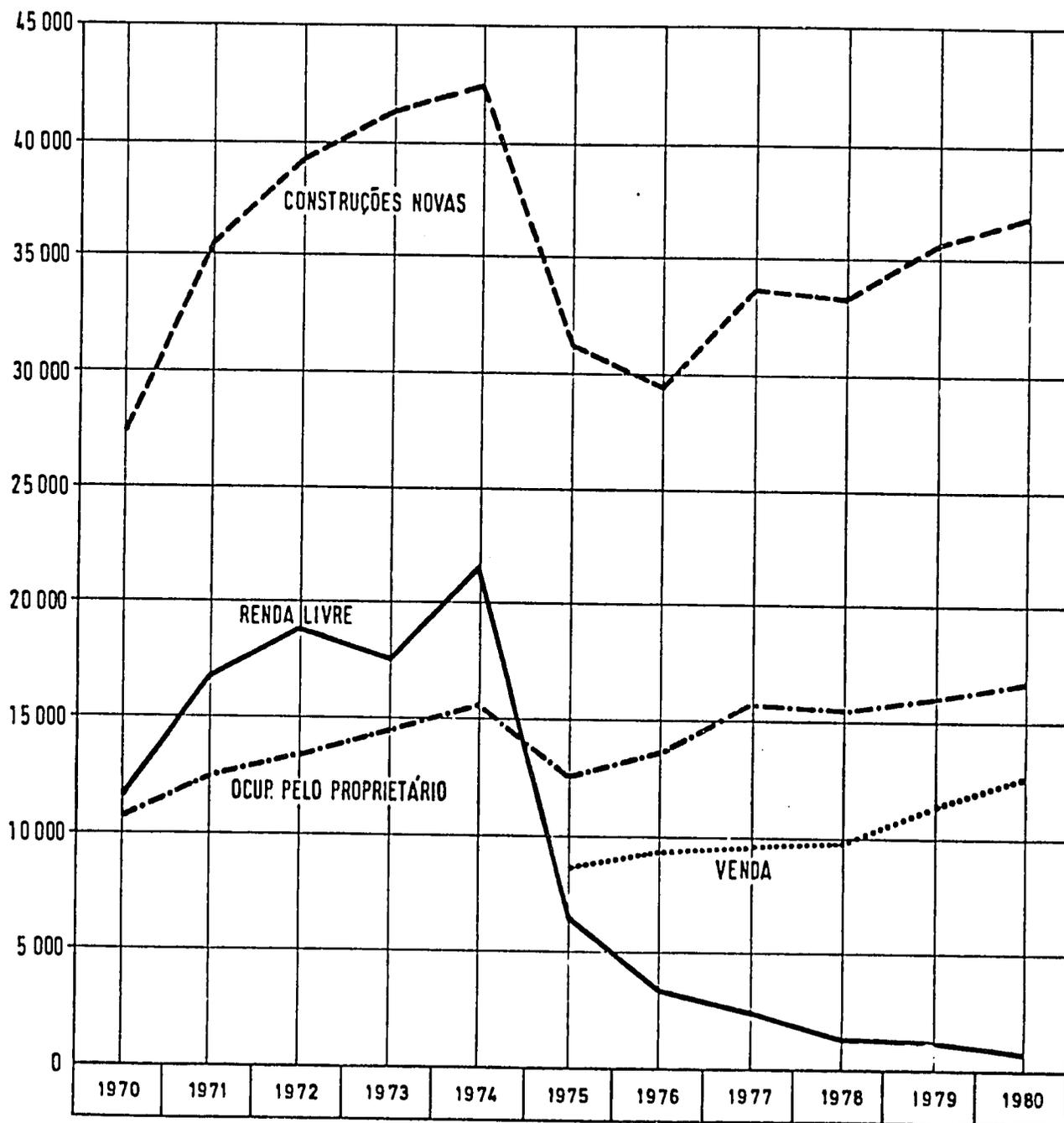
PAISES	Período 1971/74	Período 1975/79
Bélgica	5,8	7,7
Dinamarca	10,2	6,9
França	10,0	8,5
Alemanha	10,3	6,6
Grécia	16,1	14,8
Irlanda	7,2	7,7
Itália	4,6	3,1
Luxemburgo	8,3	8,7
Holanda	11,1	7,8
Portugal	5,0	3,7
Espanha	9,8	9,3
Reino Unido	5,9	5,5
Suécia	12,1	7,2
CEE	7,9	6,1

RELATIVE IMPORTANCE OF GFCF IN HOUSING IN THE GDP

(A = FBCF construção/PIB cf B = FBCF habitação/PIB cf)

PAISES		1971/74	1975/79
Bélgica	A	13,0	14,7
	B	4,9	7,0
Dinamarca	A	13,2	14,2
	B	5,7	6,9
França	A	14,4	13,7
	B	7,1	6,9
Alemanha	A	14,5	13,0
	B	6,2	5,9
Grécia	A	16,6	13,9
	B	6,9	6,8
Irlanda	A	13,2	14,1
	B	5,4	5,8
Itália	A	12,0	11,3
	B	6,0	5,3
Holanda	A	13,8	12,3
	B	6,0	5,4
Portugal	A	11,1	11,4
	B	3,2	3,2
Espanha	A	13,4	13,9
	B	5,2	6,1
Reino Unido	A	10,4	9,8
	B	3,7	3,5
Suécia	A	13,9	12,1
	B	5,3	4,6
CEE	A	13,1	12,9
	B	5,6	5,8

HOUSING PRODUCTION

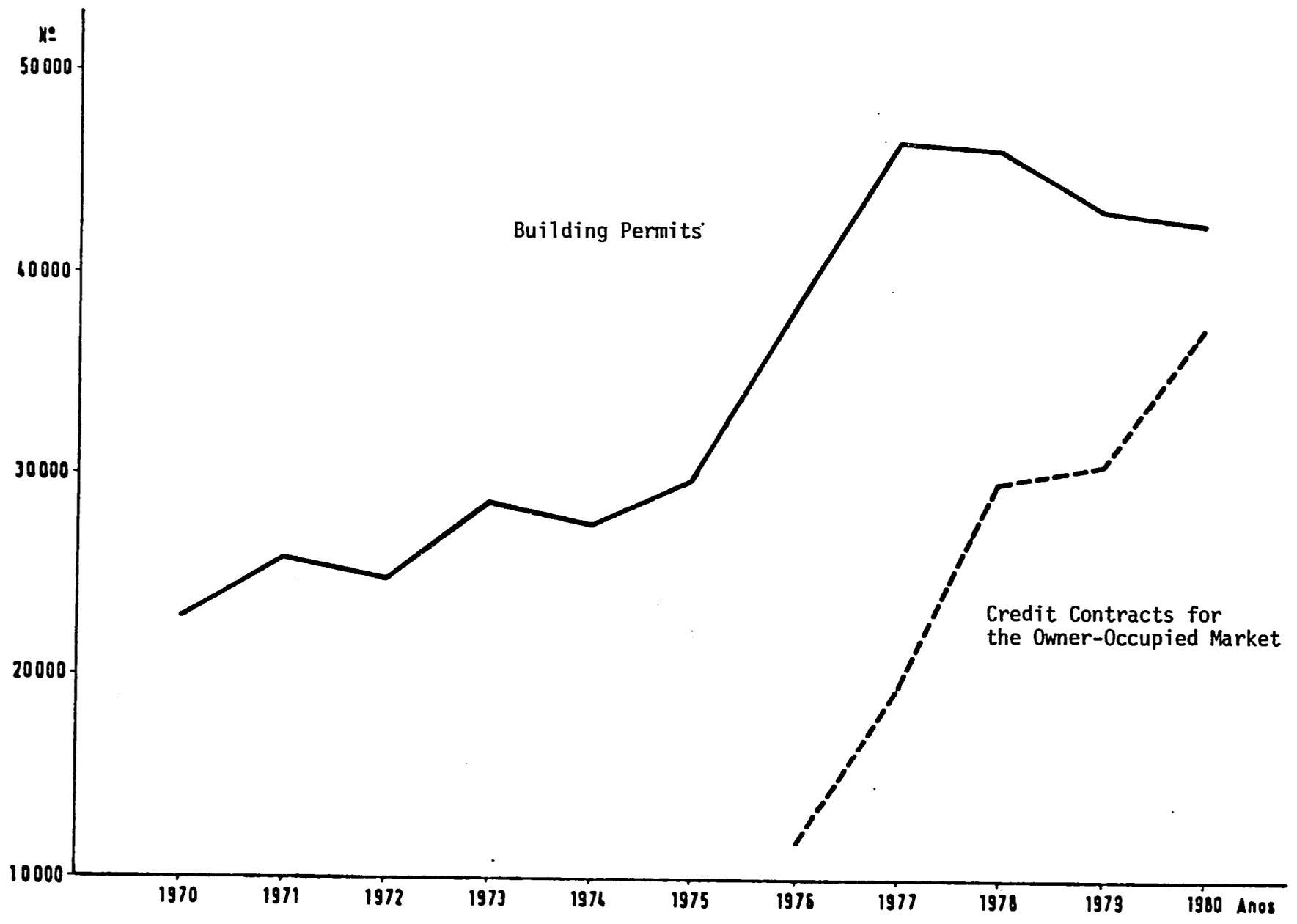


Fonte: Estatísticas da Construção e da Habitação, INE

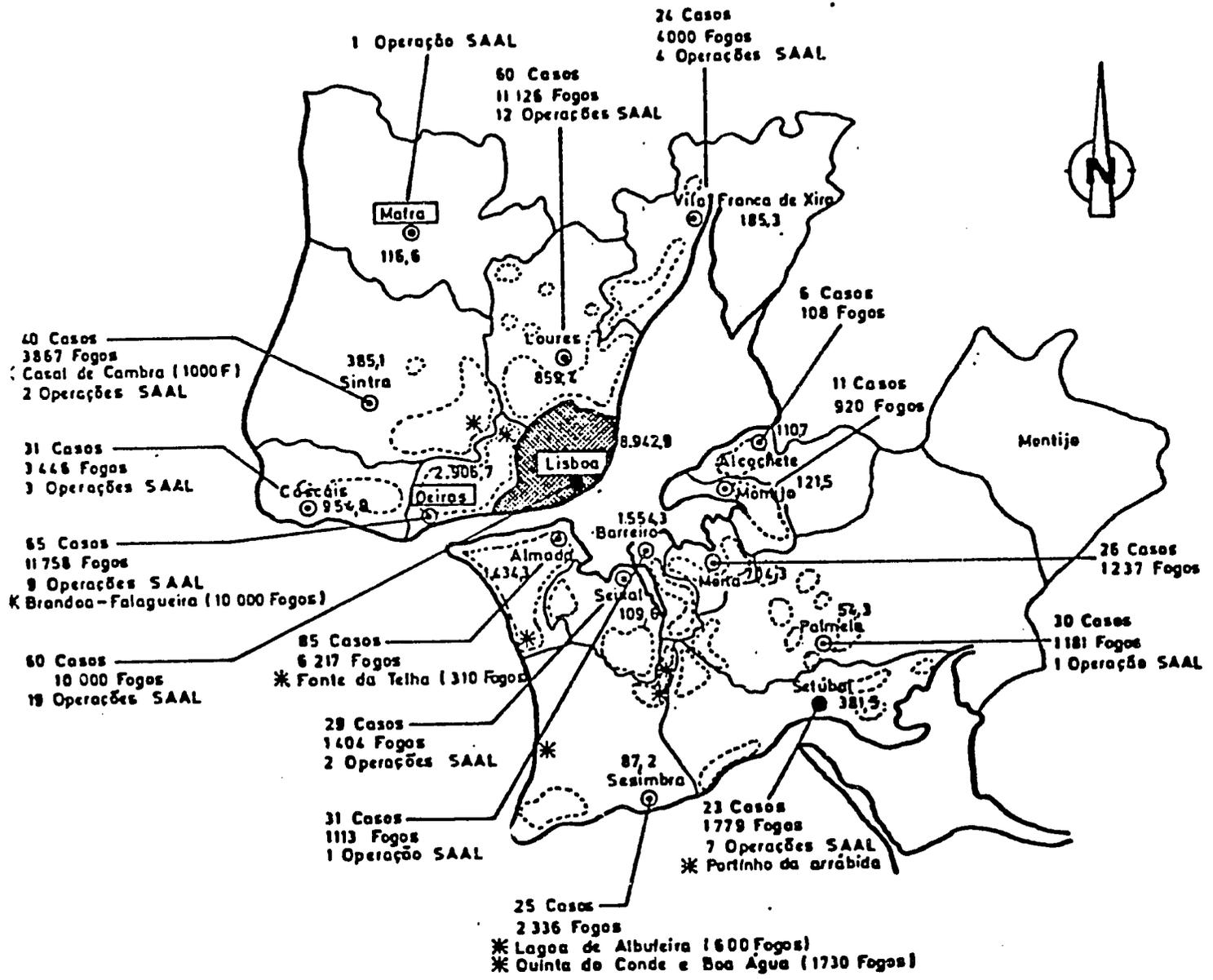
INDEX OF RENTABILITY OF INVESTMENT IN HOUSING

Média anual de 1975 = 100

Anos	Índice de Rendas das habitações em Lisboa	Índice do Custo da construção de edifícios para habitação em Lisboa	(Quociente) Índice
1970	60,7	50,3	120,7
1971	67,8	54,0	125,6
1972	77,5	56,4	137,4
1973	88,8	62,8	141,4
1974	101,7	79,9	127,3
1975	100,0	100,0	100,0
1976	121,3	113,8	106,6
1977	132,1	141,6	93,3
1978	134,5	165,7	81,2
1979	179,4	191,0	93,9
1980	199,4	236,8	84,2
1981	283,9	286,3	99,2



ILLEGAL CONSTRUCTION IN THE LISBON REGION



Legenda

- ⊙ - Sede e densidade populacional em 1970 (Hab/Km²)
- - Não respondeu ao questionário M.H.U.C. 1977
- Clandestinos dispersos
- ⊙ - Zonas de maior ocorrência
- * - Casos especiais

Anos	Rendimentos médios por família	Salário mínimo Nacional	Rendas médias em escudos das habitações arrendadas durante o ano na cidade de Lisboa Conforto do tipo A		Relação entre o valor das rendas médias e os rendimentos médios por família		Relação entre o valor das rendas médias e o salário mínimo Nacional	
			Até 4 divisões	5 - 6 divisões	Até 4 divisões	5 - 6 divisões	Até 4 divisões	5 - 6 divisões
			1968	3 100\$00	—	1 501\$00	2 233\$00	48,4%	72,0%	—	—
...								
1973	5 850\$00	—	3 163\$00	4 390\$00	54,1%	75,0%	—	—
1974		3 300\$00	3 760\$00	5 198\$00			113,9%	157,5%
1975		4 000\$00	3 695\$00	5 327\$00			92,4%	133,2%
1976	11 900\$00*	4 000\$00	4 388\$00	6 111\$00	36,9%	51,4%	109,7%	152,8%
1977		4 500\$00	4 373\$00	6 582\$00			97,2%	146,3%
1978		5 700\$00		8 233\$00			••	144,4%
1979	18 900\$00*	7 500\$00	6 415\$00	11 697\$00	33,9%	61,9%	85,5%	156,0%
1980	22 730\$00	9 000\$00	7 313\$00	13 232\$00	32,3%	58,2%	81,3%	147,0%
1981		10 700\$00	11 976\$00	14 417\$00			111,9%	134,7%

* Estimativas GEP/MHOP para finais de 1979

AFFORDABILITY INDICATORS IN RENTAL UNITS

EVOLUTION OF CREDIT FOR HOUSING
(Owner-Occupied Market)

Anos	Natureza do crédito contratado	Número de pedidos entrados	Número de contratos celebrados	Valor dos contratos celebrados (mil contos)	Valor médio dos contratos (contos)
1976	Bonificado	..	1 203	451,7	375,4
	Regime Geral		10 695	3 555,2	332,7
1977	Bonificado *	..	15 069	5 791,1	384,3
	Regime Geral		4 703	2 307,5	490,6
1978	Bonificado	34 461	23 876	11 317,4	474,0
	Regime Geral		6 112	3 553,3	581,4
1979	Bonificado	43 902	24 537	13 829,9	563,6
	Regime Geral		5 671	3 968,9	699,9
1980	Bonificado	60 727	31 702	22 825,3	722,0
	Regime Geral		5 945	4 788,1	805,5
1981	**	64 793	48 921	47 801,6	977,1

* Estimativa ** Com a aplicação do DL 435/80 deixou de se obter informação sobre esta variável

HOUSING SUBSIDIES -- A FORECAST

(1000 contos)

Entidades que suportam os subsídios	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Estado	9,5	138,7	556,6	1 219,1	2 135,7	3 052,3	3 403,3	3 278,4	3 297,7	3 329,3	3 018,1	2 342,7	1 723,7	1 214,8	832,8
B. de Portugal	-	-	278,9	950,3	1 955,2	3 243,6	3 957,5	3 751,6	3 142,5	2 187,7	1 612,5	1 639,0	1 663,7	1 686,9	1 708,2
Inst. de Crédito	7,3	295,4	812,8	1 228,8	1 696,2	2 227,8	2 472,7	2 471,5	2 464,1	2 449,2	2 423,7	2 388,9	2 348,2	2 302,0	2 249,9
TOTAL	16,8	434,1	1 648,3	3 398,1	5 787,1	8 523,7	9 833,5	9 501,5	8 904,3	7 988,8	7 054,3	6 370,6	5 735,6	5 203,7	4 790,9

* Considerando que em 1981 serão concedidos 42 milhões de contos

HOUSING DEFICIENCIES (1981)

Distritos	Carências absolutas	% em relação às famílias do Censo de 81
Aveiro	375	0,2
Beja	3 859	6,1
Braga	1 917	1,1
Bragança	3 299	5,8
C. Branco	260	0,3
Coimbra	2 422	1,8
Évora	5 944	9,3
Faro	808	0,8
Guarda	1 010	1,5
Leiria	4 862	3,6
Lisboa	8 107	1,2
Portalegre	1 382	2,8
Porto	6 375	1,5
Santarém	932	0,6
Setúbal	1 009	0,5
Vila Real	3 296	4,5
Viseu	6 366	5,1
Total	52.223	1,9

5. LAND AVAILABILITY AND TENURE

5.1. A quantified evaluation of available urban land is today very difficult since there isn't any organized official register of urban land belonging either to public or private entities.

Recognizing that necessity and importance, in July 1982 a special group was formed inside the Ministry whose task is to find an adequate methodology and to work with the official register of the urban land belonging to public entities.

In general, the main question is that there is a disparity and multiplicity of entities involved in the process and different sorts of forms of tenure, transfer, and use. Also, it is important to note that in Portugal, according to types of settlements, regions and region values, land is a factor of wealth or the main source of living.

In 1974, legislation was published forcing the declaration of available urban land but those measures were useless. In practice, the result was waste of urban land, some of it inside villages, some in expansion areas.

Simultaneously, new developments occur in peripheral areas.

5.2. The production process of urban land results from direct public administration intervention or from decisions of private entities. In the first case, it is assumed that public entities (central or local) will acquire legal titles to land, buying it from its owner, in order to improve shelter or social equipment programs.

The types of tenure can result from a simple acquisition or from an expropriation process. In this last case, there are rules that must be regarded:

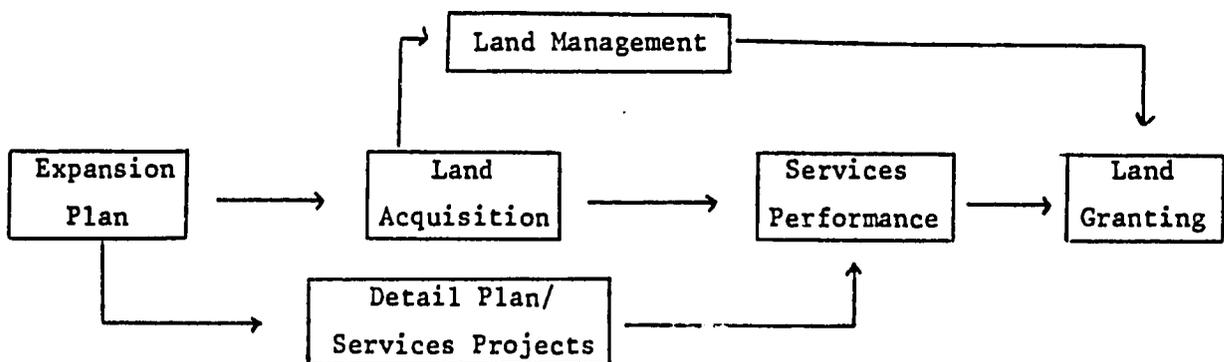
- the expropriation should be substantiated by an expressed public necessity and subject to a fair compensation based on the current and real value of the expropriated property;
- the public utility statement results from a Ministry approval of the project;

- and other necessary documents of the foreseen works;
- in the case of expropriation due to urban operations, the public necessity statement should be made by a cabinet council;
- the Government can authorize an administrative legal title to land of the expropriated property with a public utility statement if that decision is indispensable to the beginning of the planned works;
- the expropriation process can be an amicable or a litigious one. In the first case and after the public necessity statement, there is an agreement between the two parties in what concerns the amount to pay. If there is none, the total amount will be fixed by arbitration, with the possibility of appealing to the courts.

Other forms of tenure can result from the application of a preference right, from a process of association between public and private entities, or from a lot approval process.

Urban land belonging to the Administration can be granted only by renting (surface right), except when transfers are made to non-profit entities or to public enterprises. When covered by legally-approved urban plan, urban land purchase is allowed.

The phase of the production process of land urbanized by the Administration can be summarized as follows:



The delimitation of expansion areas may result from the elaboration of: a General Urban Plan (PGU), a Municipal Master Plan or a General Urban Study of the Settlement.

In the first case, PGU must be approved by the respective Ministry, in the other cases, it is for the Municipal Assembly to approve, although the ratification depends on MHOP. However, only in case of expropriation with public utility statement municipalities depend on the Central Administration once the amicable acquisition process is within the scope of autarchies.

It should be remembered that the "preliminary schemes of works to be accomplished" submitted to ministerial approval are enough for the public necessity statement and for beginning expropriation process. It is then noted that within the specific land scope, general urban studies of settlements are enough to enable autarchies to acquire land essential to urban expansion. Their dimension must not only be related to the dimensions of settlement but mainly of its growing dynamics. In practice, few autarchies have stocked land owing to financing difficulties for acquisition and land management.

5.3. Changing agricultural land into building land might be done by private initiative. It is, therefore, a lot subdivision process, that is, an "operation" having as its object the parcelling up of an area in rural or urban zones for building.

This lot subdivision notion establishes that such operations should depend on municipal permits. The main clauses of the law are:

-- the approval of lot subdivision process is subject to DGPU's opinion as well as to that of other entities, depending on the Government whenever the lotting process takes place outside the area of an approved plan;

- municipalities are allowed to reject a lot subdivision request when it is based on principles specified by the law which must be clearly referred to the applicant;
- terms are established for the concerned entities to give their opinion and also for the definite deliberation of the municipalities;
- final projects of urban works are submitted to the approval of the municipalities; whenever a building permit is not granted, applicants must be informed of the reasons -- non-approval of the lot subdivision, non-compliance with its terms and disregard of any applicable rule or technical norms.
- lot subdivision permits must be given in the capacity of a license. Urbanization works are allowed to start after the permit has been granted and then the applicant has to respond to some conditions, namely work completion term, minimum area to be assigned to the municipality for services, maximum rent or selling prices;
- lot subdivision permit will be revoked if urbanization works don't take place within one year after the granting of that permit; if they are not finished within the period fixed by the municipality or if the lot subdivision does not comply with permit requests.

A lot subdivision approval process is slow and its terms are not likely to be accepted by applicants. On the other hand, lack of land urbanized by the Administration and respective pricing process gives rise to many illegal developments outside the areas controlled by the Administration. In this context, we may say that the production of urban land by private entities is very important to urban areas' growth.

Resulting from legal or illegal parcelling, there are large built areas, or only parcelled, which could be taken for future building land stock.

6. BRIEF DESCRIPTION OF THE STUDY AND PLANNING OFFICE (GEP/HOP) OF THE HOUSING AND PUBLIC WORKS SECTORS

Organization Structures

GEP/HOP is an agency of the Housing, Public Works and Transportation, Ministry, intended for the study, coordination and technical support of the respective Government members, and for the planning and economic programming within the housing, urban and public works sectors.

The GEP/HOP is divided in several Departments:

Study and Planning Department

Control and Programming Department

Regional Coordination Department

and has a Documentation Center and an Administrative Department acting as supporting services.

Today, GEP/HOP has 73 employees, 33 of which are professionals.

Responsibilities

The main responsibilities of the GEP/HOP can be summarized as follows:

- to develop, within the economical and financial scopes, the necessary studies for the definition of the development policy within the housing, urban and public works area;
- to cooperate with the central, sectorial, and regional planning authorities in the execution of the national and regional development plans;
- to prepare, in cooperation with the Ministry Department, the annual development programs, according to the development sectorial purposes;

- to follow up the execution of the sectorial investment programs and prepare the respective execution reports.

As a consequence, the GEP/HOP is responsible for the activity of two Committees:

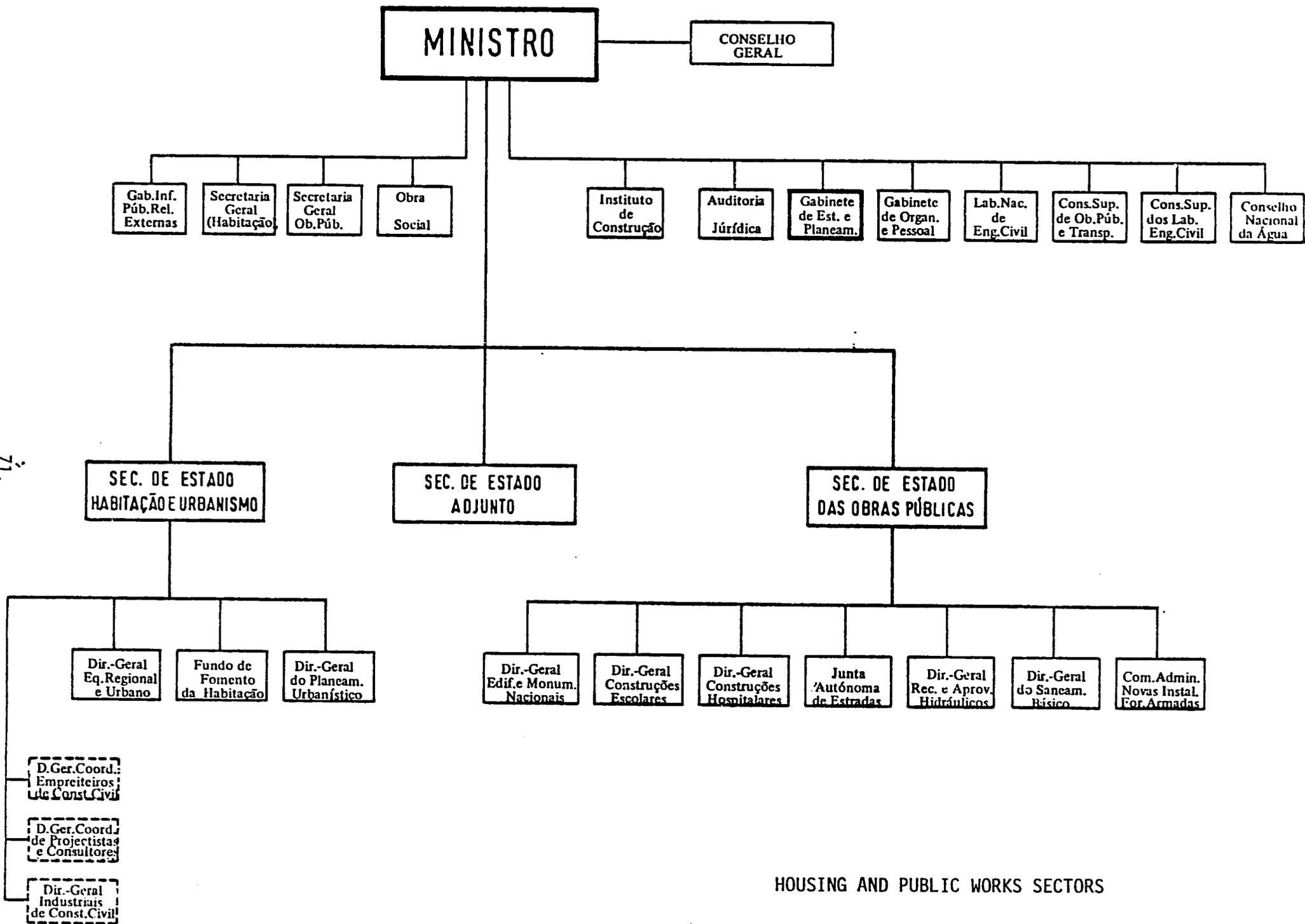
- the Housing and Public Works Planning Committee; and
- the Housing and Public Works Statistics Committee,

the duties of which are, in particular, the coordination of the planning and statistic activities and processes of the different agencies of the Ministry in the housing, urban and public works areas.

Annual Budget

As seen, the GEP/HOP is mainly an agency of technical support to the Government members and has no special programs besides the studies carried out to perform its responsibilities.

In 1982, the annual budget of the GEP/HOP amounts to 400,000 Dollars, 84% corresponding to wages and other personnel expenses. Comparatively, we can refer that the GEP/HOP annual budget for 1982 is only 0.4% of the total operating budget of the Housing Public Works and Transport Ministry.



HOUSING AND PUBLIC WORKS SECTORS

PART II

Public Administration Functions and Organic Structure in the
Fields of Housing and Town Planning.

(Development of Workshop Theme 2)

PART II

Public Administration Functions and Organic Structure in the Fields of Housing and Town Planning.

1. Evolution of Public Administration Functions and Organic Structure in the Fields of Housing and Town Planning
2. Analysis of the Situation
3. Toward a New Housing and Town Planning Policy

1. EVOLUTION OF PUBLIC ADMINISTRATION FUNCTIONS AND ORGANIC STRUCTURE IN THE FIELD OF HOUSING AND TOWN PLANNING

The economic, social and political evolution of Portugal determined the different State intervention in the Housing Sector that comprises several institutions.

In the field of town planning and infrastructure, the Ministry of Public Works (MOP), the General Director for Urbanization (DGSU) was formed in 1944, having as target the unification of the Public Sector intervention in urban and rural public development, in planning and implementation of public works and financial aid. Its role is also to promote and to encourage the urbanization of the municipalities and of important settlements. It started with four Regional Departments, reaching twenty in number in 1948, one in each capital of district of mainland, one in the Azores and another one in Madeira Island.

In 1972, it was reorganized and other General Directions were assigned some of its functions. Water and sewerage systems were assigned to the General Direction for the Basic Sanitation and the rural roads to the Roads Department.

DGSU was terminated in 1976 and replaced by the General Direction for Urban Planning (DGPU) and the General Direction for Urban and Rural Equipment (DGERU) which, after the local finance reform in 1979, ceased its financial aid to the municipalities.

Therefore, the General Direction for Urban Planning (DGPU) has, at present, the objective of promoting and coordinating the actions of urban planning, and:

- to study and propose the urban policy and to define the necessary steps for its fulfillment;
- to assure the promotion of urban plans in regional areas, as well as the studies and means regarding the approval of general and partial

- urban plans that are the responsibility of the municipalities;
- to propose the patterns and characteristics for plans and the methodology of urban planning.

The field of action of the Regional Department of DGPU are the Planning Regions, adopted for economic planning purposes. The objective of these regional departments is to support and to coordinate, in their own region, urban planning actions. They may have, as well, subregional departments, in terms of district distribution.

The goals of the General Direction for Urban and Rural Equipment (DGERU) are to:

- normalize social equipment projects of regional value;
- coordinate the intervention of several entities interested in the accomplishment of urban and rural equipment programs;
- coordinate the actions for urban rehabilitation and promote its achievement, whenever requested by the municipalities;
- approve or promote the approval, at a regional level, of social equipment work projects submitted by local authorities.

For the accomplishment of its assignment, DGERU has also district departments.

In the housing field, no public department existed until 1969 in MOP structure. However, the housing reports for the Intercalar National Plan and for the III National Development Plan (1966/67), proposed a department which was felt absolutely necessary to the basic reform of the housing sector and to the organization of an adequate housing policy. This entity would plan, coordinate and monitor the activities in the housing sector, being its two

fundamental fields of action, housing policy and planning. The first area would include the collection of data regarding housing and equipment needs, the participation in the preliminary works of national development plans, the study and proposal of legal documents within land policies, financing and taxation and, of standards for social housing, and for the activity of promoting entities and finally, the accomplishment of actions concerning the diffusion and training of experts and guidance of the architecture field.

It was assumed that the institution would have a direct action in the elaboration of housing programs and would work also in social housing financing. That entity would not only increase the activity of public and semi-public sectors but also guide and encourage private enterprise.

In 1969, it was created in MOP, the Housing Development Fund (FFH) to cooperate in the solution of the housing problems of people who could not be supported by Social Security or similar institutions. Its assignment was not, therefore, only the study of social housing problems but also the performance, within the scope of MOP, of the housing policy defined by the Government, being allowed to buy and urbanize plots, build and grant subsidies for construction, give technical support and cooperation to municipalities and other entities. Then

extinguished, and integrating personnel from the Economic Housing Department of Social Security Ministry.

This reorganization allowed FFH to act more intensively as housing promoter. On the other hand, it was allowed to emit obligations, to grant loans and subsidies, to associate with private promoters and building enterprises, to take part in societies of mixed economy, etc.

In 1973, Housing Regional Departments of FFH in North, Center, Lisbon and South were created.

It was after 1974 that FFH was fully given authority, not only in housing promotion but also in the elaboration of new housing programs, namely, the introduction of Economic Housing Cooperatives and of SAAL -- a program which supported the Dwellers Association in the solution of housing problems -- the granting of loans to municipalities, PRID -- program for housing rehabilitation -- and Development Contracts for Housing.

Thus, FFH plays the role of housing promoter and manager of credit institute and of technical support for other entities.

In 1976, the Ministry of Housing, Town Planning and Construction was created, having in mind a broader definition and performance of housing policy.

Also in 1976, Housing Municipal Services were formed in some municipalities, with administrative and financial autonomy, whose main function was the management of housing stock of the respective municipalities and the attribution, according to the legal systems, of housing units built and acquired by the state, by other public or non-profit private institutions. Furthermore, they were responsible for the housing demand and supply research in the respective fields of action, and the participation in the preservation and rehabilitation of the housing stock that might be enforced by law or by other municipal entities.

The local finance reform in 1979 had an important impact in the performance and activity of the institutional organization in the field of housing, town planning and infrastructure. However, the delimitation of functions between the Central and Local Administration must be understood by the law which defines the scope of assignments of each level regarding investments and that has not yet been approved.

2. ANALYSIS OF THE SITUATION

2.1. It is difficult to judge the institutional framework and its performance without considering the bases and the aims of the policies adopted, for which, theoretically, the institutions would be the performing instruments.

However, we must admit that the establishment and evolution of the institutions in the housing and town planning sector, do not seem to have been much a result of a joint definition of policies and of the institutional organization needed for its performance. On the contrary, short-term problems and other circumstances controlled in many cases the evolutive process which took place.

Thus, the institutions underwent consecutive reforms or temporary changes, without a clear definition of a general housing and town planning policy to support them.

As a result, a permanent instability among the institutions and respective personnel can be found, as well as a progressive lack of motivation and lack of efficiency.

2.2. Broadly speaking, we can consider five main intervention areas within housing policy and the performance of Public Administration:

- Analysis and definition of housing policy

- Town planning and infrastructure
- Housing promotion
- Financing
- Housing Management

In each of these areas there are some functions that can be accomplished by Public Administration, although with a different intervention and through different institutional levels.

On the table on the next page, we summarize those functions as well as of the intervening entities, as of 1981.

2.3. The definition of housing policy and its performing instruments are within the Government's scope. However, owing to its complexity, there must be a permanent study of the situation, formulation and modernization of its regulative aspects, monitoring the efficiency of the instruments and results obtained

Although several departments have a certain intervention in this field, there is no department which might ensure those functions. When FFH was formed in 1969, it was designated for that function until its reorganization in 1972. Although the Planning Department (GPC) of ex-MHUC had been developing surveys on general housing matters as well as some specific instruments, that was not its main assignment and many important areas were left out of control.

Thus, there is no global management of the National Budget resources, which, directly or indirectly are spent within the housing activities, and their rentability is not analyzed according to the Government's political goals. This brings us into a situation where total expenditure of the Public Administration in housing is not exactly known.

PUBLIC ADMINISTRATION INTERVENTION AREAS IN HOUSING POLICY

AND ITS AGENCIES

HOUSING POLICY STUDY AND DEFINITION	TOWNPLANNING AND SERVICES	HOUSING PROMOTION	FINANCING	HOUSING MANAGEMENT
<ul style="list-style-type: none"> - Goals and strategies definitons - Planning - Policy measures <ul style="list-style-type: none"> Urban land and townpanning Credit and subsidies Rents and Renting Market Institutions Organization - General and specific norms <ul style="list-style-type: none"> Technical norms Instrumental norms Institutions operating norms - Available Resources <ul style="list-style-type: none"> Management Buget Resources Credit Institutions Human and technical resources <p>Agencies</p> <p>MHOP</p> <ul style="list-style-type: none"> GEP FFH DGPU DGERU DGSB <p>LNEC</p> <p>CSOP</p> <p>MFP</p> <ul style="list-style-type: none"> SET SEO BP Credit Institutions <p>MJ</p>	<ul style="list-style-type: none"> - Subsectorial policies definitons <ul style="list-style-type: none"> Phisical planning Townplanning Basic Sanitation - Land use actions <ul style="list-style-type: none"> Urban plans elaboration and approval Administrative acts - Availability actions by Public Administration (purchasing, expropriation and urban programs) by private entities Services (Public Adm. and private entities) Tax measures - Instrumental norms <p>Agencies</p> <p>MHOP</p> <ul style="list-style-type: none"> DGPU DGERU DGSB FFH CSOP <p>MFP</p> <p>SEO (DGCI)</p> <p>MAI</p> <ul style="list-style-type: none"> DGARL GAT'S CCR'S <p>Local Administration</p>	<ul style="list-style-type: none"> - Public Sector <ul style="list-style-type: none"> FFH Municipalities Others (GAS, etc.) - Co-operative Sector <ul style="list-style-type: none"> Old co-operatives Lowcost housing Co-operatives - Private Sector <ul style="list-style-type: none"> Free market Individual Enterprises Supported CDH'S - Agencies <p>MHOP</p> <ul style="list-style-type: none"> FFH MFP GAS Others <p>Local Administration</p>	<ul style="list-style-type: none"> - Commercial Credit - Building Mortgage Credit - self-building and owner's purchase market credit system - Credit to Public promoters <ul style="list-style-type: none"> FFH GAS Municipalities - Credit to FFH to loan to other entities <ul style="list-style-type: none"> Housing co-operatives Self-building - Credit for dwelling rehabilitation and renewal PRID - Other credit systems <ul style="list-style-type: none"> Saving credit system (emigrants) - Subsidies <ul style="list-style-type: none"> Explicits Interest differentials Owner's purchase market Housing co-operatives Municipalities For Projects Housing co-operatives Implicits <ul style="list-style-type: none"> Taxes Rents Resoluble property PRID Other FFH programs <p>Agencies</p> <p>MHOP</p> <ul style="list-style-type: none"> FFH <p>MFP</p> <ul style="list-style-type: none"> SET BP Credit Institutions 	<ul style="list-style-type: none"> - Public Sector <ul style="list-style-type: none"> FFH (SMH) CNP GAS Municipalities - Private Sector <ul style="list-style-type: none"> Individuals Others <p>Agencies-</p> <p>MHOP</p> <p>FFH</p> <p>MFP</p> <ul style="list-style-type: none"> GAS CNP <p>Local Administration</p>

As to credit, there is no systematic forecast of available resources for housing investment. Furthermore, its compatibility with useful goals cannot be determined, and the subsidies implicit in the existing credit systems are not adequate to the goals of the housing policies.

Likewise, there is no systematic articulation between the fiscal policies regarding housing and housing policy goals.

The formulation of regulative, technical and other standards is assigned to several institutions and it is not a continuous or programmed activity. It should be noted, in this respect, the difficulty in giving social housing a regulative definition and the little updating that RGEU -- General Regulation for Urban Construction -- has had since 1975 as an important instrument in this matter.

We can also say that there is no forecast of available human and technological resources; their distribution throughout the country and their foreseeable evolution. In short, we come to the conclusion that there is no department in Public Administration assigned traditional functions in the housing field.

2.4. Town planning, availability of land, and infrastructure are considered critical areas in housing policy. There are no subsectorial policies or the ones existing are not updated and many of their instruments are not competent.

Local Authorities should be assigned the local urban planning and management tasks as well as the tasks concerning the availability of serviced land.

At present, there are no important subsectorial policies or, at least, they are not clearly formulated, regarding territorial management, town planning and basic sanitation.

The main role of the Urban Administration in land use has not been administration activities. The elaboration and approval of urban procedures is very slow and confusing.

The situation is also discouraging concerning the availability of urbanized land. Public Administration does not have programs for the urbanization and granting of land for the different promoters (public, cooperative and private ones) and the situation will worsen with the termination of the land purchase program which had the participation of DGPU. In this field, procedures are very slow and complicated as well. We cannot even count on private enterprise if legislation on private plots is not updated. Therefore, squatting and spontaneous urbanization continue to occur.

Fiscal tools which are a very important vehicle to improve availability of urban land do not assume an important role, especially in what concerns land speculation or vacant land. Land policy has never been used regarding development value taxes.

There are no financing strategies for land purchase and servicing, although municipalities may apply to credit lines established in 1980.

2.5. In the field of housing promotion, and broadly speaking, the different frameworks are very insignificant.

The public sector has not yet exceeded 5,000 units of annual production although it has improved as compared to recent years. FFH Direct Promotion Program has not always amounted to 4,000 units/year. This represents about 30% of the average number of units per year of its Direct Promotion Program. This means that the building time required by most enterprises is about four years.

Concerning the public sector, there are no production patterns, i.e., there is no previous research on consignees, neither on the alternatives for promotion forms consistent with different use systems, or on the adjustment of financing types to dwelling granting forms.

In short, with regard to the promotion of the public sector, we may

synthesize as follows:

- most of the decisions on housing promotion have been the result of the circumstances and not of adequate planning processes;
- there are no promotion patterns to articulate plans with financing strategies. The latter are not consistent with consignees and use systems;

- there is no evident economic rationality in public promotion. This was not very important when its financing was only from the State Budget (OGE) but this cannot be sustained when it applies to capital markets.

The public housing promotion entities have been the FFH and the municipalities. After all the organizational reforms FFH has been through, it may be characterized by:

- low productivity and waste of funds resulting from its high dimension, without any framework and functional organizing stability adapted to that dimension and to its several assignments;

- deficient distribution of personnel both at spatial and interprofessional levels;
- indefiniton, almost permanent in the last few years, of forms and amounts of financing;
- little autonomy in management, akin to the one in any public service with financial and administrative autonomy, which does not seem to be consistent with its nature and promotional activities.

In turn, the municipalities have slightly used direct promotion of dwellings, without FFH support. With some exceptions, the municipalities do not have the technical capacity nor the adequate dimension necessary to promote housing in a systematic way. On the other hand, the financing of that promotion is almost impossible, given the following:

- Municipalities are not allowed to exceed a certain financing level from credit institutions; therefore, most of them cannot afford starting either small or medium enterprises;
- Municipalities have, within their financing support, the priority to build water and sewerage systems;
- Borrowing loans require a certain method of finance decisions and management which is difficult to be achieved by municipalities owing to their organization.

It is still very early to be able to estimate the autonomous promotional capacity of the cooperative sector because it is still being developed.

However, it may already be noted that:

- it depends, largely, on the support of State and municipalities;
- it fails on organization and recourses.

In such circumstances, there are doubts that cooperative promotion might work autonomously, i.e., without special support of the State and, namely, it is not expected to "fit" in rules and guarantees of bank systems.

Moreover, besides the cooperatives, Portugal does not have many other non-profit promoters. The influence of Misericordias and other charitable institutions is not important in what concerns housing promotion.

As to the private sector, more than 50% of tis promotion is made by individual initiatives for owner's building and the rest is due to private promoters.

The private enterprise promotion is of small and medium size, predominating individual enterprises with deficient organizational structure and financing framework and limited promotional capacity. Its selling promotion is strictly dependent on the major or minor efficiency of owner's purchasing credit systems.

It should be noted, thus, the non-existence of real estate societies with solid financial structures and ability for direct intervention in the capital markets. On the other hand, the institutional investors, which played an important role in the past, hardly operate owing to the urban rent control situation.

Finally, the association between the public and private sectors for limited-cost housing promotion has nearly ceased since 1977, that was the last year in which new Housing Development Contracts took place.

2.6. The definition of credit policy, housing subsidies and its instruments, is an assignment of the Central Administration.

As the problem of financing policy is not worth analyzing on this paper, we shall only turn to the most direct intervention aspects of the public sector.

The Public housing promotion for renting property was until 1979, exclusively financed by the State Budget. Since 1979, FFH credits have been established to cover a share of the investment in several undertakings to be rented under a property program.

Meanwhile, in spite of that experience, there was never a definition or establishment of formal credit systems for public promotion in which:

- the types of financing and their conditions were adjusted to the different programs;
- there were ways of assuring the financial equilibrium of housing promotion and management entities;

-- the sources and resources of the financing institutions have never been defined.

Subsidies are not planned in a systematic way. Their economical and social efficiency have not been analyzed. Therefore, the subsidies granted by FFH -- technical rents, personal rent installments, resolvable property, PRID, self-building, credit to cooperatives and municipalities are not controlled and result in an insufficiency of funds for the debt service.

Neither the credit nor the subsidies granted to construction and to owner's market are planned. The volumes of credit depend on general credit ceilings imposed to credit institutions and subsidies are calculated afterwards.

2.7. At present, there is no economic rationality in public or private housing management.

The current rent policy of the private sector does not allow any housing management with a sound economic base and this is the main reason for the deterioration of the housing stock.

Broadly speaking, the dwelling granting systems in public property management does not guarantee the recovery of invested capital or cover the conservation and exploitation costs. On the other hand, the adjustment of housing service cost to the economic capacity of families is very different.

Besides these aspects, it should be noted that public stock is largely concentrated in three or four institutions, the conservation of dwellings is defective, and the degradation of the stock is substantial. Therefore, the public stock should be reduced to some rentable property dwellings, although this could only be expected once important profit schemes are established.

Finally, decentralization schemes are required in housing management.

Housing Municipal Services may be very useful if promoters and owners are ensured of a return on their investments adequate to the costs and responsibilities they assumed.

3. TOWARD A NEW HOUSING AND TOWN PLANNING POLICY

3.1. Assuming that there are several orienting principles that must serve as basis of reformulation and conception of a housing policy and its institutional structures, the Government started to implement a series of measures tending to solve the problems and disconnections of the sector.

There are three general principles:

The first is connected with the vast area of intervention in order to fulfill shelter objectives. This compels the study and the systematic search of the best instruments to perform housing policy, the institutional specialization and the distribution of duties and responsibilities through the different levels of the public administration.

The second is the need of changing the present legislative picture in what concerns the rental market, adjusting with the necessary balance, the owner's purchase and rental markets, according to income distribution and to the different purchasing power of the families within the housing sector.

The third, and last principle, is related to the necessary control of the subsidies given by the State to the housing sector. Although forecasts show that today they reach significant amounts, it is important to implement measures tending to describe in a more clear way their effective destination, management and a better and permanent adjustment to the State resources.

Besides these general principles, there are specific ones that must be achieved. For example, it is indispensable to increase the housing promotion

capability, not only supporting private or non-profit entities, but also granting this capability to the State shelter agencies. This can only be achieved by obtaining some objective goals such as economical operation, decentralization, decision and management autonomy.

As to credit and subsidies, there is not any financial system for public promotion for the support of other non-profit initiatives. Thus, it is important to establish a system which would assure funds, in which types and costs of the different funds fit their employment, which enables a financial equilibrium of the promoting and managerial entities as well as guarantees the recovery of investments.

This financial system requires, among other things, the establishment of different credit lines according to their employment (land acquisition, infrastructure, rental and owner purchase markets, etc.) and an adequate institutional structure (direct financing through present credit institutions or a specific credit agency whose fund sources could be more diversified and, therefore, with a lower average cost).

Another principle is the management of the housing patrimony which implies adequate measures both to public and private entities such as decentralization, a new rental system in which rents are adjusted to effective costs, and a more efficient and feasible regulation process and rules.

Availability of urban land is another important factor within housing policy that implies the improvement of new programs and credit lines for all the entities interested or involved in the process.

3.2. Since 1981, the Government policy toward these aspects has been very objective. Summarizing some of the measures taken, we can point out:

- In October 1981, a Deliberation of the Cabinet Council, expressing in general the principles analyzed above, established the basis for the extinction of FFH. Its principal aims were the institutional structure alternatives, in what concerns the normative and supervising responsibilities of the State within the housing sector.
- In February 1982, norms were established for the purchase of the State and Social Security housing stock.
- In May 1982, a group of important measures were approved, related with these assumptions;
 - a program of immediate action regarding works and finance, assuring the continuance of FFH housing programs and implementing 15,000 new housing units in 1982;
 - a Deliberation establishing the preferential access principles to credit markets through selection criteria for building and purchasing of housing units;
 - the effective extinction of FFH and other Departments intended to act within the housing and building sectors;
- the establishment of the Housing Investment Support Fund (FAIH) the main responsibility of which is to finance the building of social housing units.
- Furthermore, in May 1982, the Government published two important instruments tending to perform the availability of urban land. One, to support in the medium term the urban development -- Priority Urban Development Areas (ACUPs) -- the other one, defining the immediate available urban land to build -- Priority Building Development Areas (ACUPs). Another important tool of this sector that was approved, is the Municipality Master Plan (PDM) that, concerns economic and social development and enables the coordination of the local regional and national policies.

Besides these measures, the Government is studying the institutional structure that will carry out its normative and supervising responsibilities within the housing and building sectors, having already some alternative proposals.

However, everyone knows that 1982/83 will be a transition period, not only because of the institutional changes but because there are two other important components.

One is the financial and credit blockages which are and will be affecting the housing sector. The other one is the decentralization program that transfers the housing promotion responsibilities to the Municipalities. Most of them will be involved in structure and financial problems to succeed in this field although there will be the FAIH to support them with credit.

It is based on this fact that the Government is also studying the possible alternatives to establish, together with the Municipalities, regional promoting entities, whose main goal will be to support the municipal programs for sheltering the urban poor. These entities will be managed and financed by the Municipalities of the region they will cover, as Municipal enterprises, having at the beginning an amount of capital from the State Budget.

Taking into account the principles expressed in 3.1., we can also say that other measures are being studied or have been improved, among others:

- an inventory of the urban land held by public institutions;
- the social housing programs, intending to adapt them to another perspective and financial conditions;
- the housing credit system, in particular, a credit line to housing purchase for renting;
- the renting market, an inquiry being carried out to analyze specific characteristics of owners, tenants and buildings.

- the rehabilitation of the housing stock;
- shelter quality rules and correlative costs;
- the urban, housing and building tax systems.

This paper is a summary of a summarized presentation of:

THE DESIGN OF DWELLING ENVIRONMENTS

Horacio C aminos

Massachusetts Institute of Technology, October 15, 1982

BACKGROUND

In our urbanizing world, *living conditions and dwelling environments are rapidly deteriorating* for the majority of the population. The problem is aggravated in developing areas because political and economic systems are unstable, social wellbeing is the privilege of a minority in power, and the settlement process is largely out of control. Deterioration is reaching staggering proportions as a result of two combined factors: *the population is growing at an accelerated pace, and the rate of growth is higher among the poor.* The time to address vital issues is running out: What are the limits of this growth in terms of resources as well as human/environment compatibility? Can growth be controlled? How? Is it possible for the majority of the people to attain living standards that are the privilege today of a few? Can the "growth of poverty" be reversed?

Today, more than ever, the life of people in cities depends not only on related social, economic, political systems, not only on land and shelter, but also on a complex system of networks. Some are underground, like water, sewerage, storm drainage, gas. Some are on the ground, like markets, schools, playgrounds, health services, refuse collection, fire protection, police, transportation, roads. Some are in the air, like electricity, telephone, street lighting.

In rapid urbanization, the direct implications of the growth of poverty are not only that *more and more dwellings, land and services are needed*, but also, which is more critical, that these dwellings, land and services should be provided to a *growing population that has less and less capacity to pay for them.* This is the immediate problem that today faces governments, municipalities,

administrations, large corporations, in short the individuals in power. The problem is made more critical because the modern practices and procedures of urban development are wasteful of land and services on a very large scale and moreover do not help the poor in any circumstance.

But the poor are helping themselves. They have the most urgent needs for everything: food, education, shelter, employment, etc. They have no choice but to create their own system of survival, because daily needs cannot wait. The basis of this system is to secure tenancy of a small piece of land. *Secure tenancy of land is one of the means to achieve social and economic mobility by the people that do not possess wealth, goods, education, or any other form of assets.*

This popular system of survival provides, nowadays, the most common type of settlements in all the urban areas of rapid growth. They are called squatter settlements or illegal developments when they do not have the sanction of public authorities; and "site and services" projects when they are officially sponsored. At the present time, the welfare of the majority of the population is hardly an accomplished fact in regard to the goals of social, economic and political development. Meanwhile, squatter settlements, illegal developments, or site and services projects are forms that provide at least a means of survival and a temporary mechanism for the progressive improvement of the community.

Furthermore, in rapid urbanization, the larger demand for dwellings, land and services by the low income majority has been perceived by policy makers in very narrow terms, not only isolated from the multiple factors affecting the lives of individuals, but also isolated from policies of national interest. That is, *the problem has been perceived merely in terms of the quantity of dwelling units to be provided and not in terms, for instance, of potential human resources that this demand can activate.* Human resources are the most valuable asset of any society, but they

also cannot be redirected overnight to perform in a new world depending heavily on technology. However, only the poor, out of necessity, have been struggling to make the best of this condition despite the unconcern of policy makers. In one way or another, squatters, by seeking a means of survival and improvement, are also, in the process, creating jobs, evolving skills, raising educational levels, developing individual and group responsibility, rewarding initiative and participation, providing specific goals, and giving a sense of accomplishment. If these circumstances are fully recognized, *governments should channel the demand for shelter into national policies incorporating the development of human resources.*

Finally, it is clear that the *alternatives in "housing" are to provide complete dwellings to a few beneficiaries, or to provide only basic utilities and services to a much larger sector of the population.* If the latter course is taken, major efforts of the government should be shifted from the provision of shelter to the provision of utilities and services. Regardless of the many other considerations, the latter course has the following in its favor: The construction of a shelter can be done within the limited resources of individuals because inexpensive materials can be utilized, no special skills are necessary, or simple tools only are required, self-help or artisans or small contractors can be employed, and the shelter can always be reduced to a bare minimum. While the construction of a shelter is a relatively simple operation, the provision of utilities to a community is not because it demands more than individual effort. It demands a collective effort both from the community and from the government in planning and mobilizing political, economical, and technical resources. In short, the choice is clear: *construction of utilities will always be a government task, but housing should be left to individuals.*

CONTEXT

This paper is focussed specifically in: developing countries, urban areas, low income sectors of the population. However the issues presented here obviously transcend these limits.

EMPHASIS

It is in the physical aspects of settlements (urban layout, infrastructure and services, housing) and their implications (social, economic, political) and vice versa.

APPROACH

Can not be other than interdisciplinary (social, economic, political, administrative, etchnical). However in order to communicate across boundaries one needs to understand the language of others. Otherwise, fruitful interchange is not possible.

AUDIENCE

This paper is addressed to those concerned and involved concurrently in different aspects of the provision of shelter. That is: politicians, sociologists, economists, engineers, designers, planners, administrators, managers. Therefore an effort has been made to minimize "jargon" and to use plain language.

REQUIREMENTS

It is clear that an adequate physical design is a sine qua non condition to satisfy the social, economic, political requirements of a project. It has been abundantly proved everywhere, that

a bad or mediocre design results in disaster or at least penalizes the users heavily no matter how good is the management, financing, etc., of the project. Other understandable requirements are: Land utilization should be efficient. User participation should be maximized. Institutional participation should be minimized. Projects should be manageable. Costs should be minimized (capital costs of land, infrastructure, services; as well as maintenance and operation.)

POLICIES

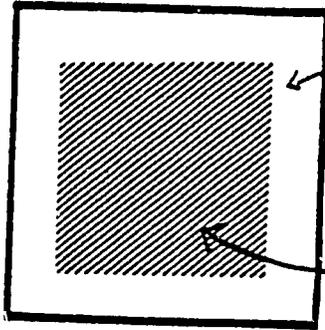
The framework for an adequate physical design are:

- 1) Land Utilization (not land use): Land serviced, taxable: should be maximized. Land servicing, non taxable: should be minimized. Relationship among users, responsible agents, physical controls; should be coherent.
- 2) Circulation System (most costly component): Determines: patterns of circulation, urban layout, basic infrastructure network. Determine structure of social grouping. Determine commercial potential, land values. Lines of transit, lines of access: should be differentiated.
- 3) Infrastructure (Water supply, sewage disposal; storm drainage; electricity; street lighting) Service levels - utilities layouts: should be differentiated. Basic networks - facilities/service connections: should be differentiated. Unit quantities - unit costs: should be differentiated.
- 4) Block Layouts: Grid: should be adopted. Gridiron: should be avoided.
- 5) Subdivisions: Smaller the lots, larger are the areas for public streets and street lengths; smaller is the percentage of private/semiprivate land for lots. Individual lots that do not facilitate grouping: should be avoided. Condominium lots that allow grouping: should be adopted.
- 6) Evaluations: Layout, infrastructure, basic networks/service connections, in this order, should be within certain measurable limits, to achieve satisfactory and economical solutions.

In the following pages the six points are graphically illustrated.

1. LAND UTILIZATION (Not land use)

PERCENT



LAND SERVICING:

- Public
- Non Taxable

LAND SERVICED:

- Private
- Taxable

SHOULD BE:

MINIMIZED

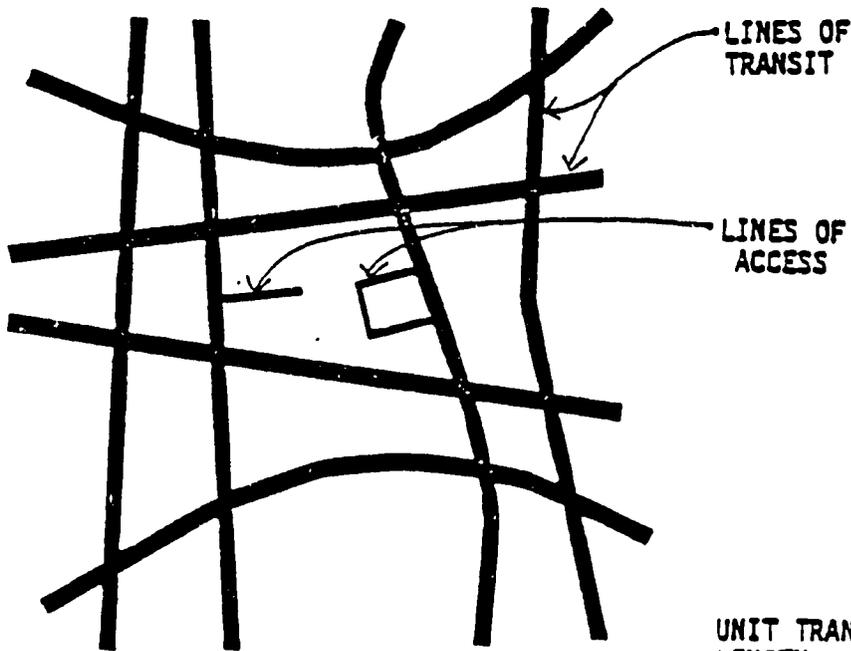
MAXIMIZED

Relationship among users, responsible agents, controls

COHERENT

2. CIRCULATION SYSTEM (Pedestrians, vehicles)

LAYOUT



LINES OF TRANSIT

LINES OF ACCESS

DIFFERENTIATED

DIFFERENTIATED

UNIT TRANSIT LENGTH m/Ha

MINIMIZED

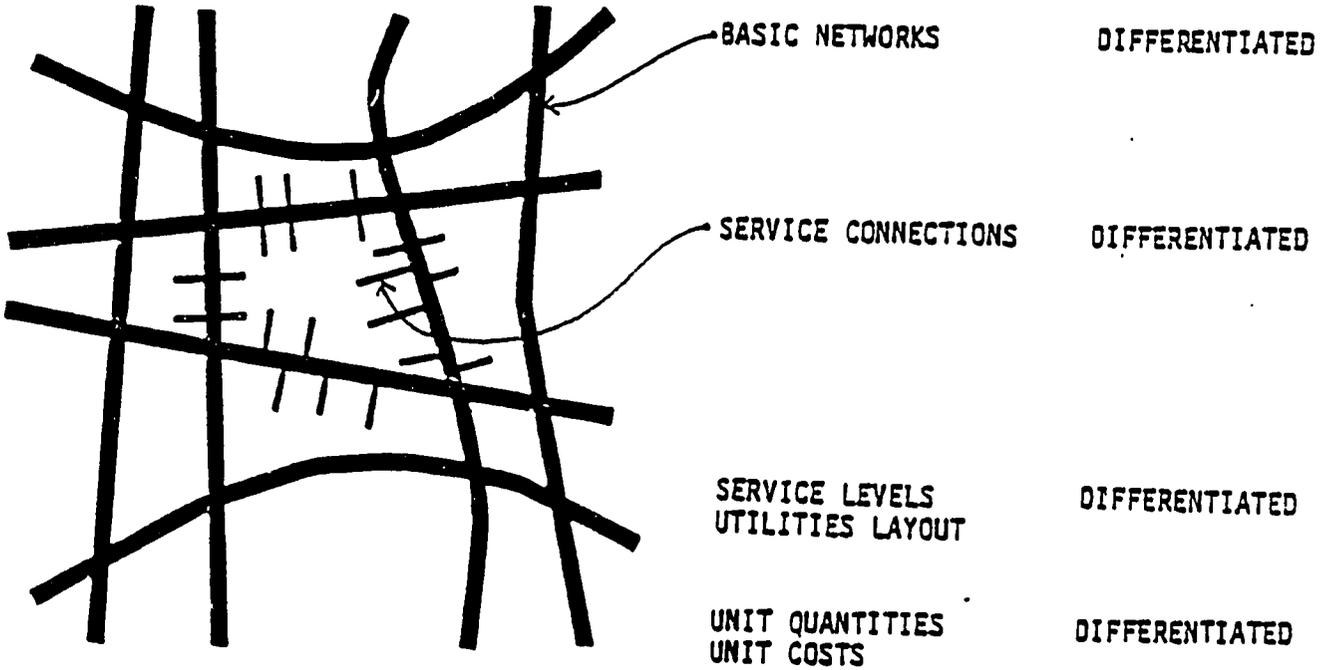
Determine patterns of circulation, urban layout, basic infrastructure, grouping, commercial potential, land values.

RECOGNIZED

3. INFRASTRUCTURE (Water, sewerage, drainage, electricity, street lighting)

SHOULD BE:

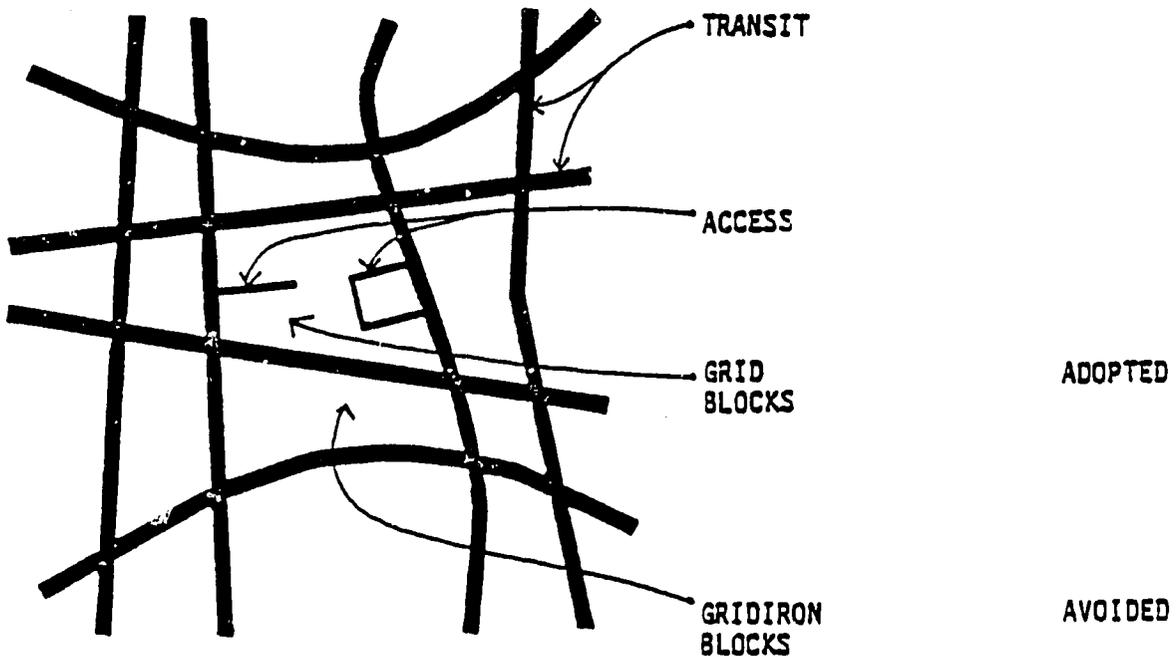
LAYOUT



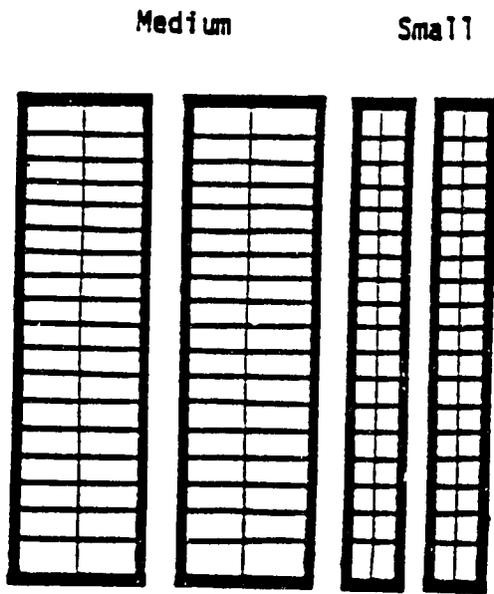
4. BLOCKS LAYOUTS

SHOULD BE:

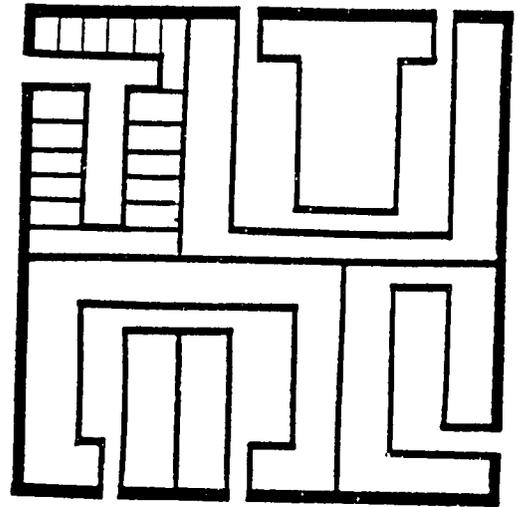
LAYOUT



5. SUBDIVISIONS (Lots)

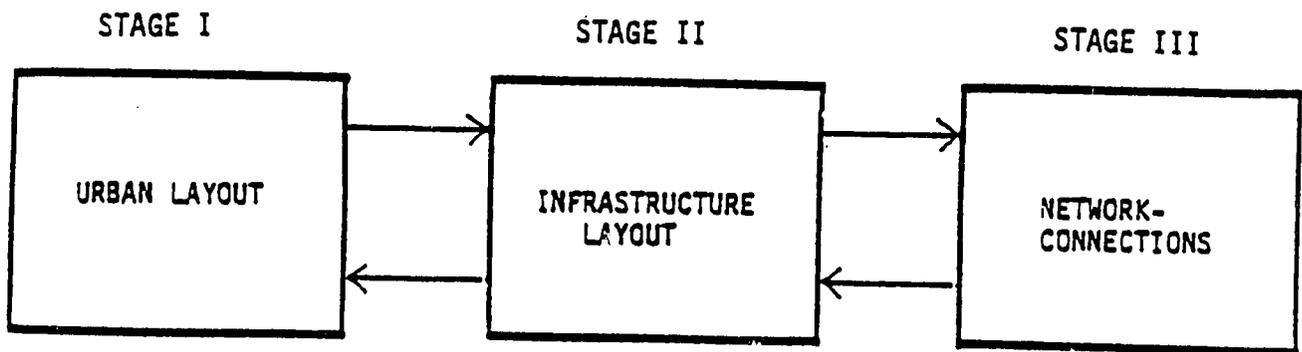


INDIVIDUAL LOTS - GRIDIRON BLOCKS
Does not facilitate grouping
Should be avoided



CONDOMINIUM LOTS - GRID BLOCKS
Facilitate grouping
Should be adopted

6. EVALUATIONS (A recurring procedure in the process of design.
Not after the patient is dead.)



Should be within certain measurable limits
to achieve satisfactory/economical solutions.

ALL THE ABOVE POLICIES WILL BE REFLECTED IN
THE COSTS.

NATURAL HAZARDS AND HOUSING POLICY

By Alcira Kreimer, Ph.D.
The George Washington University

Natural Hazards and Housing Development

Natural hazards are given features of the environment that can substantially damage the housing stock of a country or region. For example, the damage to housing due to hurricanes is caused by the environmental effect of violent wind and excessive rainfall and from the secondary effects of river flooding, storm surges, and landslides. Damage to housing due to earthquakes is caused by the environmental effect of violent oscillatory movements of the earth's surface, loose and unconsolidated soil materials, landslides and mudflows, liquefaction of soil, avalanches, tsunamis, and fires. Damage to housing due to tornadoes is caused by the environment effect of the confined action of strong rotary winds and a partial vacuum in the centre of a vortex, a hollow cone in which centrifugal forces produce a substantial lowering of pressure. Even though natural hazards are given features of the environment, the extent of damage to the housing sector that can result from a natural hazard is not a given fact, but it is a function of actions taken, or not taken in the process of housing development. The extent of the damage is the result of the interaction between natural hazards and socioeconomic and spatial activities.

In recent years, there has been some improvement in the natural disaster sensitivity of decisions concerning housing in some countries. In spite of this increased sensitivity, costly but avoidable destruction remains commonplace and due to the increase of world population and to accelerated urban migration casualties from disasters have increased over the last years. Recent disasters of major magnitude include, among others: the Guatemala earthquake of 1976 where 23,000 people died and 1,000,000 were left homeless; the Sabel drought of 1972-75, with an estimate of 100,000 deaths and 23,000,000 people affected; the Nicaragua earthquake of 1972, where 11,000 people died

and 300,000 were left homeless; the Bangladesh cyclone and tidal wave of 1970, with an estimate of 224,000 and 600,000 people affected respectively; the earthquake in Peru in May 1970 that caused 65,000 death and massive destruction, with catastrophic effects caused by an avalanche due to the earth tremors that buried the city of Yangay.

The vast extent of this destruction, particularly in developing countries is the result of a lack of understanding of the impact of human activities on the risk of natural hazards. In the housing sector specifically, development activities that would promote a better utilization of resources for preventing and mitigating the disruptive impacts of natural disasters are ignored. In housing development, this is a problem that results from both planned and spontaneous activities. Housing development influences where people and structures are located and concentrated, what materials and methods are used in construction, how topography is modified, what emergency systems are supported, what resource reserves are maintained, what economic linkages are favored, what communication and transportation systems are available or developed, and what public facilities are installed. Seldom does housing development planning account directly and integrally for natural hazards. Spontaneous housing development is even less responsive to the potential catastrophic impacts of natural hazards.

The direct and immediate impacts of disasters can be characterized as loss of life and health, destruction and damage to housing, interruption of social services, interruption of economic activity, interruptions of transportation and communication, and interruption of utilities. The long-term implications of this disruption on development may be felt for many years and may well have negative total impacts that far exceed those of the

socioeconomic disruption. It is for this reason that preparation for immediate response and relief alone as is usually the case in disaster-prone countries is inefficient and inadequate.

Natural Disaster Stages

Natural disasters are often thought of as discrete unitary events. In fact, there are processes that can be characterized in terms of a sequence of stages with implications for prevention, mitigation, response and recovery activities. One such sequence is as follows:

- o predisaster conditions that determine disaster vulnerability and the needs generated by a specific disaster agent;
- o warning, which triggers precautionary activity;
- o threat, which prompts survival action;
- o impact, the period in which the disaster strikes;
- o inventory, which entails an evaluation of damages and recovery needs;
- o rescue, which is often spontaneous, local, and poorly organized activity;
- o remedy, which consists of organized and professional relief, medical care, and security measures; and
- o recovery, which involves restoration and rehabilitation.

While such a sequential characterization helps to understand the disaster continuum, the stages must not be thought of as sharply defined and without overlap. Moreover, their intensities, durations, and implications vary for different types of disaster agents, for different locales, and for different communities.

Both governments and populations in disaster-prone countries tend to resist discussion of the prospect of natural disasters in housing planning or to allocate more than token resources to disaster prevention and preparedness during "normal" periods. Certain types of disasters are relatively infrequent and this fact provides convenient grounds for procrastination in disaster planning. However, there is minimal additional cost associated with the integration of natural hazard considerations into a housing development process. Thus, disaster vulnerability should be accounted for in the housing development process from the earliest stages of planning through the continuing implementation, management, administration, and operation functions.

Housing and Disaster Types

There are differences in the types of natural disasters, in their impacts to housing, and in the responses that each disaster agent requires. Disasters can be events of sudden onset or of slow onset. In a disaster of sudden onset, a single event or a chain of related events concentrated in time cause the damage. Sudden onset disasters, such as earthquakes, can destroy the housing stock and temporarily disrupt the normal systems that are necessary for recovery, such as the market of building materials, the availability of labor, and the systems needed for the transportation of materials. Slow onset disasters, such as droughts, in addition to the disruption of the normal systems, can create a substantial dislocation of the affected population, generate migration and relocation. Thus, the ability of the population to reconstruct housing can be seriously disrupted for a prolonged period of time and progressively deteriorate, according to the duration of the disaster.

The extent and characteristics of losses in the housing sector are not only consequences of the type of disaster agent, but also of the housing conditions prevalent before the disaster in the affected country. In many developing countries, substandard housing conditions are an endemic problem, an important component is the vulnerability of the population to natural hazards. Vulnerability can be defined as a susceptibility to loss of a population at risk when a hazard of a certain magnitude occurs. Population groups living in highly vulnerable conditions -- poorly-built houses located in unsafe areas, crowded, and lacking sanitation -- are more likely to suffer damage and losses than groups who live in safer environments that facilitate their survival. Vulnerable conditions in "normal" times result in greater damage after disasters. For instance, accelerated urban growth, massive urban migration, and the increased cost of urban land have accelerated the construction of settlements in vulnerable areas. The type of land tenure and land use that promote construction on alluvial and unconsolidated soils, for instance, highly unstable in an earthquake-prone area are also factors that add to the vulnerability equation. National development policies that promote regional imbalances by promoting high concentrations of industry, commerce and housing in disaster-prone areas contribute to increased disaster vulnerability in those areas.

What Happens After a Disaster?

Important decisions have to be made about evacuation, relief, rehabilitation, and reconstruction. There is a need to provide assistance rapidly, to restore the systems that have been disrupted, to feed the victims and to house them. In order to take action, disaster assistance groups need information quickly, yet in the chaos following a calamity, accurate information

may be difficult to get. Communication channels among different government sectors may be interrupted, communications with the affected areas may be disrupted and, as a result, areas may be isolated.

Housing shortages are substantially aggravated. Housing deficiencies produce instability and usually an increased sensitivity in both the national government and the international community because of potential political repercussions of housing shortages. Efforts to solve the housing shortages by national, bilateral, and international agencies become concentrated in terms of time and capital investment. Disaster-stricken communities face problems requiring rapid and extensive departures from routine activities. In general, they have great resourcefulness and adaptability and there is considerable spontaneous and highly-organized social action. Potentially, there are many opportunities for implementing changes in housing during the rehabilitation and reconstruction process after major disasters. Those changes could lead to the adoption of preventive measures to mitigate future disasters, improve housing conditions, provide needed infrastructure and public utility systems, and reinforce existing community and social organizations. In many cases, these opportunities are used advantageously by local, national, voluntary, and international groups that actively participate in the reconstruction process. In other cases, the housing reconstruction process is disappointing due to lack of coordination among the groups participating in the task, overwhelming pressures on manpower and materials, use of inappropriate technologies, and inaccurate and misleading information on the extent of damages and the nature of the resulting needs.

Planning and management of the housing reconstruction process requires information concerning the following:

- o Availability of local construction material for rebuilding in order to avoid the expense (time, money, and effort) involved in importing materials and also to avoid disruptions of the construction materials market.
- o Availability of skilled construction workers to supervise the construction and train the population in safe construction methods.
- o Availability of labor that could be used in housing construction if not needed elsewhere (agriculture, industry, etc.).
- o Possible use of existing organizations (cooperatives, community organizations) to provide leadership, training, management, and distribution outlets for materials and tools.
- o Assessment of the customary focus of housing and settlement in the stricken areas.
- o Land tenure situation.

Housing Provision: Prevention and Remedies

Disasters generate a substantial increase in the demand for housing and the post-disaster situation provides a very conducive context to adopt measures to prevent adverse effects of potential hazardous events. In a very hypothetical ideal case, major changes and the reduction of vulnerability in the reconstruction of the housing sector require not only the provision of housing to the homeless, but also the introduction of preventive measures in the development of housing. As shown in Figure 1, there are a number of options for addressing prevention in reconstruction.

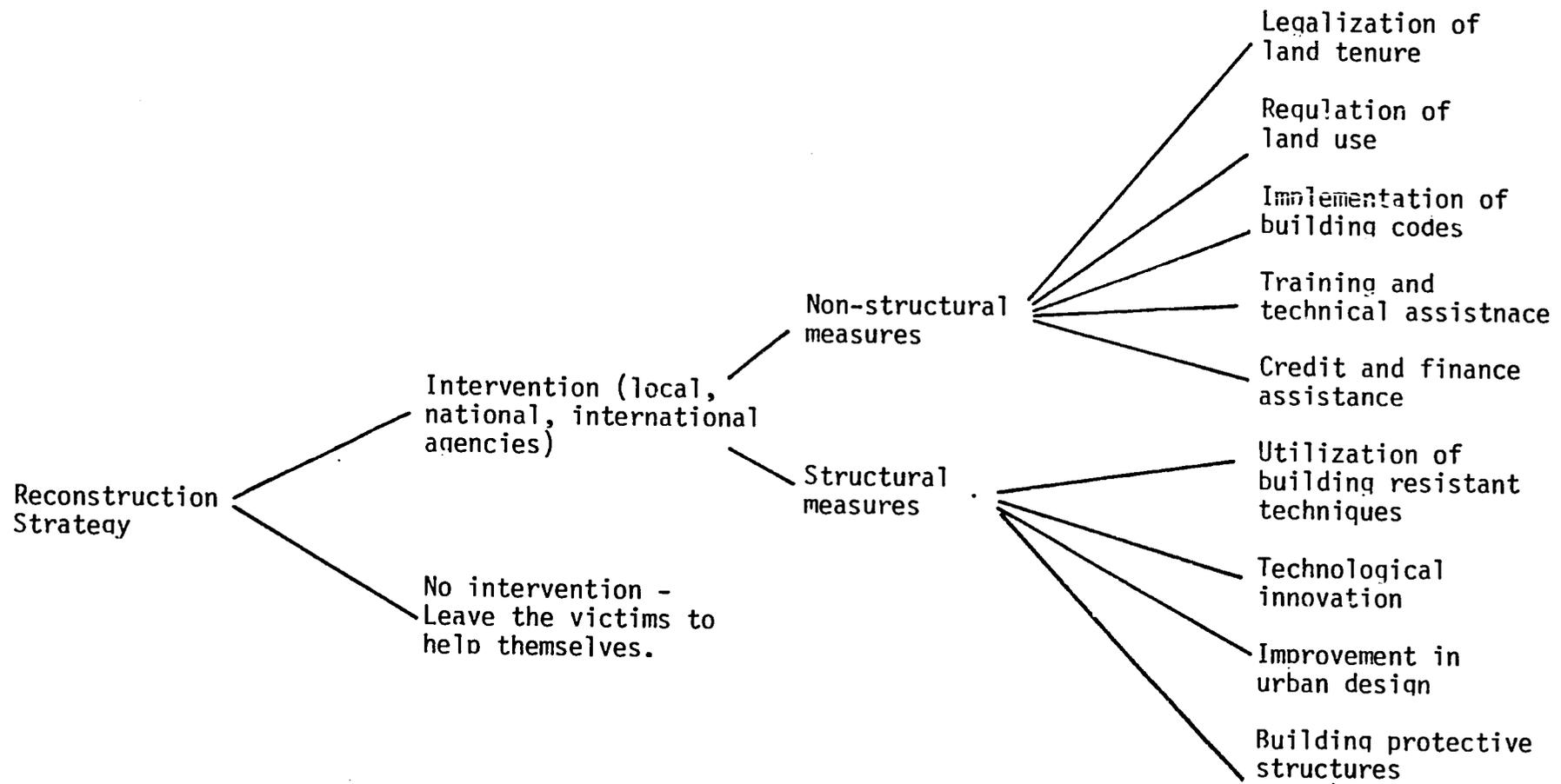


FIGURE 1

Preventive measures vary substantially and they include non-structural methods (legalization of tenure, regulation of land use, definition of appropriate building codes and safety measures, training and technical assistance, increase in community awareness, etc.) and structural methods (improved construction techniques, improved land use, improved urban design, construction of dikes to prevent river flooding, etc.).

Reconstruction Strategies

After disasters, many housing-related agencies conceive the provision of shelter as a temporal experience that evolves from emergency (e.g., tents, prefabricated precarious structures), to temporary (e.g., small units consisting of tools and walls without any infrastructure or services), to permanent structures (units built of durable materials according to well defined standardized area codes). Usually, most shelter available following a disaster is provided by victims themselves or by their extended families and friends. The provision of emergency shelter faces several problems. The cost of emergency shelter can be high and approximate that of permanent shelter. Delays in the delivery and distribution of the units, and a complex bureaucracy in charge of emergency housing can affect the speedy provisions of the units, which are, therefore, built and distributed a long time after the disaster and even after the permanent houses are built. Instead of attempting to provide emergency shelter or temporary housing, a better strategy is to accelerate the rapid reconstruction of permanent housing. This approach makes possible to concentrate limited resources in the housing sector in those areas where they will have a long-term impact and it helps the affected population to return to normalcy rapidly.

Thus, the shelter that is provided for temporary purposes have certain components that could facilitate its evolution into a permanent structure. The implementation of this strategy requires institutional and governmental support to focus on the key issues of providing housing. Those key issues are as follows:

- o Location: The location of housing in terms of access to employment opportunities is as important as the construction materials for the dwellings. In many cases, post-disaster pressures force the reconstruction of housing in locations far from employment opportunities and social services, increasing the long-range cost of living in that dwelling.
- o Security of Land Tenure: Tenure arrangements are essential in stimulating a rapid reconstruction process since they affect the security of occupancy and therefore the motivation of the residents to invest money and labor in rebuilding the housing units. In many cases, post-disaster housing provided on sites not owned by the occupants has affected the pace of reconstruction. Disasters provide an opportunity for governments and housing agencies to use emergency powers to acquire land, and to develop it, or to zone, lay out and subdivide publicly-owned land. Other alternatives to facilitate the occupancy of a given site could be to provide provisional tenure of the land to the occupants, lease purchase arrangements (in cases in which land sales take an excessive amount of time) or to provide certificates of occupancy (when the legal procedures are too complex),

Land values usually increase substantially after a disaster, therefore, land acquisitions procedures should be initiated immediately after the disaster.

- o On- Site Services: The essential components of housing must be considered from the outset. Adequate sanitation, electricity, waste disposal, and drainage are essential to the health of one population and to the consolidation of the housing reconstruction process. In post-disaster situations, shelter is often seen as the primary need, and housing programs tend to ignore the provisions of services.
- o Control of Prices: Unless a strict control of prices is established by the government of the affected country, the context of scarce resources will create a rise in the prices of basic construction materials, land and labor. Considerable inflationary pressures are the result of a rapid increase in the prices of imported goods (i.e., roofing materials), shortages of labor, and inelasticity in the supply of certain local products affected by the disaster. Inflation and speculation are promoted by the lack of actions on the part of the involved government to control and regulate individual activities in the private sector. Price controls, and control of speculation and hoarding of materials should be established at all points in the housing reconstruction process.

Conclusion

Natural hazard considerations should be integrated into the national housing development and management process. There is minimal additional cost associated with such integration, and as the housing development and management processes are upgraded, natural hazard preventive planning should naturally

be upgraded as well. Thus, disaster vulnerability should be accounted for in the housing development process from the earliest stages of planning through the continuing implementation, administration, and maintenance functions.

Disasters have the potential to be accelerating factors of housing changes. The type of disaster agent, the magnitude of the damage, historical and cultural factors, access to resources, the new visibility attained by existing housing shortages and deficiencies, and the characteristics of the built environment are elements that will help to determine the nature of changes in housing during the reconstruction following disasters.

Preventive actions rather than palliative approaches are essential for development and frequently ignored by the short-term considerations that prevail immediately after a disaster. Governments should use the emergency situation to play an important role in land acquisition, regulation of tenure, and provision of services. Special efforts should be made to minimize the adverse effects of emergency activities, and to use the opportunity for developing an improved structure for housing.

REFERENCES

- Committee on International Disaster Assistance. The Role of Technology in International Disaster Assistance: Proceedings of the Committee on International Disaster Assistance Workshop, March 1977. Washington, D.C.: National Academy of Sciences, 1978.
- Committee on International Disaster Assistance (CIDA), Commission on Socio-technical Systems. Assessing International Disaster Needs. Washington, D.C.: National Academy of Sciences, 1979.
- Fattal, S.G. "General Structural Characteristics of Buildings and Building Materials," Design, Siting, and Construction of Low-Cost Housing and Community Buildings to Better Withstand Earthquakes and Windstorms, W.E. Reps and E. Simiu (eds.). Washington, D.C.: National Bureau of Standards, 1974. pp. 3-12.
- Glass, Roger et al. "Earthquake Injuries Related to Housing in a Guatemalan Village". Science, Vol. 197. pp. 638-643, 1977.
- Grimes, Orville. Housing for Low-Income Urban Families. Baltimore and London: The Johns Hopkins University Press, 1976.
- Simiu, E. "Structural Performance of Low-Cost Housing and Community Buildings Under Windstorm Conditions." Design, Siting, and Community Buildings to Better Withstand Earthquakes and Windstorm. W. F. Reps and E. Simiu (eds.) Washington, D.C.: National Bureau of Standards, 1974. pp. 28-37.
- United Nations. Low Cost Construction Resistant to Earthquakes and Hurricanes. New York: UN, 1975.
- United Nations. Prevention et Attenuation des Catastrophes. Vol. 7, Aspects Economiques. New York: United Nations, 1979.

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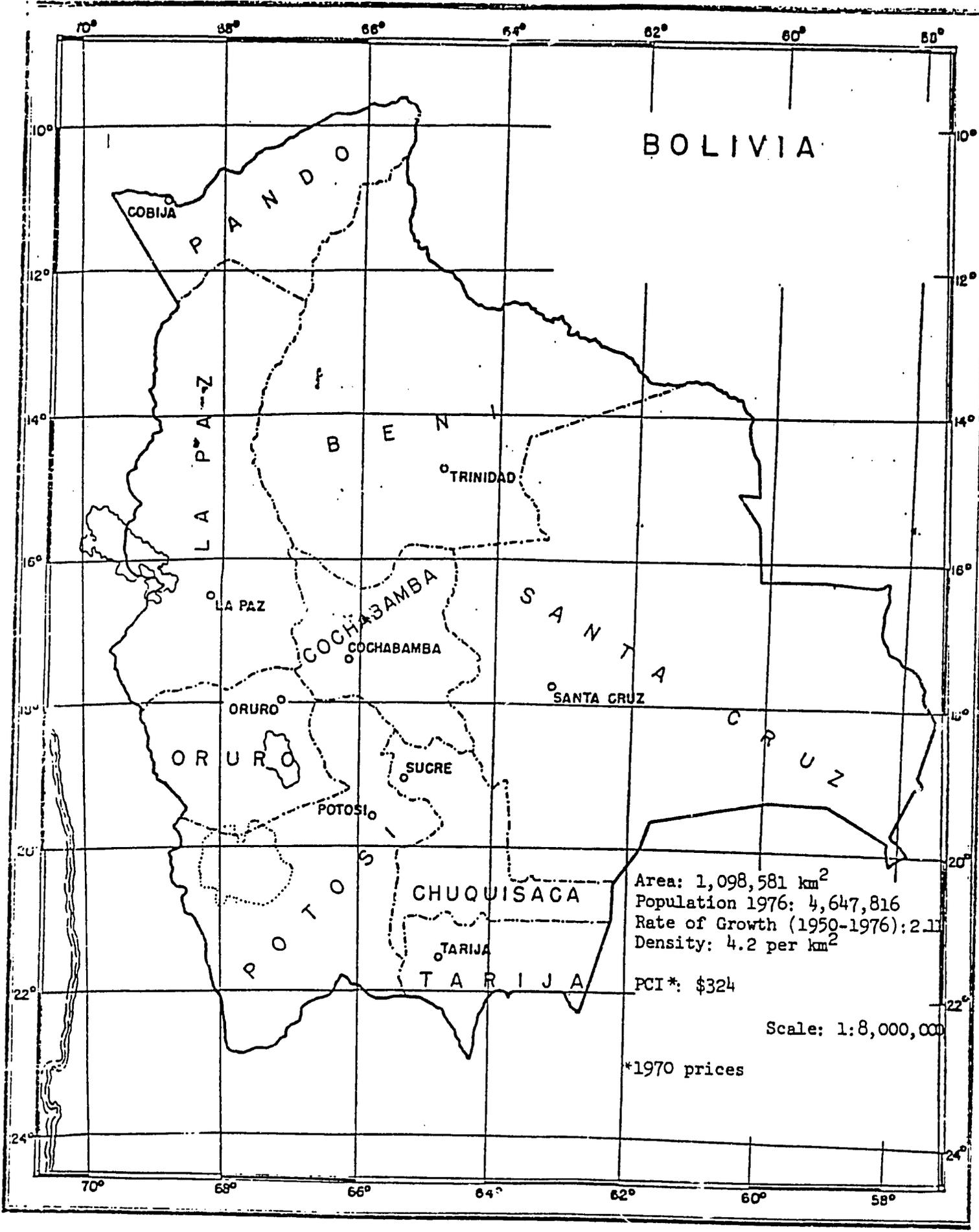
COUNTRY: BOLIVIA

THE HOUSING SECTOR
IN THE CONYEXT OF THE BOLIVIAN ECONOMY

By: Marcelo H. Miranda

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BOLIVIA

Area: 1,098,581 km²
 Population 1976: 4,647,816
 Rate of Growth (1950-1976): 2.11
 Density: 4.2 per km²

PCI*: \$324

Scale: 1:8,000,000

*1970 prices

I. BACKGROUND

A. Overview of the Country.

Bolivia, located in the middle of South America, has an area of about 1.1 million square kilometers. By 1976, its population was 4.6 million and had an estimated growth rate of between 2.1 to 2.3 percent per year. About 60% of its population is Indian and derive their income from agriculture.

The average nuclear family numbers approximately 5 members. Problems of health are severe, with men's life expectancy averaging 47 years and women 51. Only 11.2% of the rural population live in areas which have adequate sewage disposal, and access to potable water is available to only 12%. The nationwide crude death rate is estimated at 18.5 per thousand and the infant mortality rate for children under 1 year of age in rural areas at 235 per thousand.

The rural family typically lives in an adobe dwelling which has no basic sanitary conveniences. It consumes only 77% of its minimum daily requirements of calories and 49% of its minimum daily requirements of proteins. Approximately 33-35% of the family's income is spent on food, depending on the size of the family and its age composition. Housing accounts for 16% of the family's expenditure, if urban; 3%, if rural; and clothing, approximately 14%.

Of the total population over 15 years of age, 60% are illiterate. The school-aged population between 5 and 19 years of age is 1.7 million or 37% of the total population. Of this group, 61% live in rural areas, of which only 36% were attending school as late as 1975.^{1/}

^{1/}The statistics are based on the 1976 National Census.

Land tenure systems greatly influence the relative wealth and position of rural inhabitants. The organizational structure of the sector reflects, in part, the sweeping effects of the Agrarian Reform Program undertaken in 1952-53. The average size of rural properties adjudicated under the program vary from 4.4 to 110 hectares. However, landholdings are even smaller as a result of inheritance practices which have led to fragmentation.

B. Description of the Low-Income Groups.

i. Urban Poor.

The urban poor are the subgroup that is most assimilated in the national culture. They compose the lowest strata in a loosely-defined class structure. Compared with the other beneficiary subgroups, they exhibit the highest incidence of formal training (rates of completion of primary school are high and some incidence of attendance in secondary school), as well as the use of Spanish as the principal language. The nuclear family is the typical household arrangement, although extended households are maintained by a reduced percentage of recent immigrants from rural areas. Income is derived principally from wage labor, and it is not uncommon that several members of the household draw an income.

Participation in "community type" social groupings occurs on the basis of particular interests which include: religious associations, unions, sports clubs, neighborhood councils and informal groupings of people who have immigrated from the same region of the country. With regard to housing, this urban poor subgroup tends to emulate middle-class behavior and values (e.g., separate cooking, sleeping and entertaining areas; discrete sleeping quarters for parents and children of different sexes; and indoor plumbing).

ii. Rural Town Poor

This beneficiary subgroup represents an intermediate point among the beneficiary types and is the least assimilated into the national mainstream. In most cases, they are the poor segment of rural towns at the province administrative level.^{2/} Such towns are characterized by: (1) a population made up of multiple ethnic groups (mestizo, cholo, Indian) stratified into a defined class structure; (2) daily and/or weekly markets; (3) other services and institutions (health clinics, churches, nuclear schools, and transportation facilities) not found in more remote areas; and (4) a public administrative structure with officials appointed by the national government.

The lower-class of these towns is made up of mestizos (cholos) and Indian peasants who have recently emigrated from the surrounding countryside. Compared with their counterparts in urban areas, they have less formal training (cholos may have completed primary school but the schooling of Indian immigrants is extremely low). The dominant language used by members of this subgroup is a direct function of the time spent in the town setting; those with longer tenure are more comfortable in Spanish, while more recent arrivals tend to rely more on a vernacular (e.g., Quechua or Aymara) tongue. Similar to language, the family structure of this subgroup reflects their state of transition from a rural to an urban lifestyle. Both nuclear and extended units are found; the determining factor in any particular case is again the length of time that the family has lived in the rural town setting.

The family, either nuclear or extended, is also the basic economic

^{2/}Administrative levels of rural Bolivia, in descending order, are Department, Province and Canton.

unit. Economic activity is generally a mixture of agriculture and commercial pursuits. A prevalent combination finds husbands and sons engaged in small-scale farming, while wives and daughters manage a small store or produce handicrafts. A second combination is one in which the husband works as an artisan (mason, carpenter) or is involved in the provision of services, while the rest of the family runs the commercial and/or agricultural enterprise. As a result, the family has multiple sources of relatively low income, which are not as fixed, nor as frequent as that of salaried employees with periodic pay schedules.

The housing characteristics of this subgroup tends to reflect the transitional state of its members. Depending on the location (altiplano, valleys, lowlands) local building materials (e.g., adobe, wood, thatch, tin) predominate. While there is some division of living area for discrete purposes (i.e., cooking and sleeping) the separation of space does not approach that of middle- or upper-class households. The availability of electricity and in-house water connections is a function of the advance of development programs in the community. Finally, coinciding with the economic pattern of this beneficiary subgroup, housing tends to be multi-purpose. It includes not only the living quarters but also space for the family's commercial endeavor (store or artisan workshop) and/or agricultural activities (storage areas for tools, harvested crops and barnyard animals).

iii. Rural Village Poor

This subgroup is the least assimilated into the Bolivian mainstream. It is made up of people living in peasant villages at a canton

administrative level or in isolated homesteads. Normally, the residents of these villages belong to the same ethnic group (in most cases Quechua or Aymara Indians); and the vernacular language predominates, although there is some facility with Spanish.

This subgroup is characterized by a number of cohesive elements at both the family and community levels which could serve to introduce and diffuse housing solutions. An extended household, composed of parents, children, spouses of children and grandchildren, is the basic social unit (exceptions are the lowland colonization areas where the nuclear arrangement predominates). Moreover, there are practices of work exchanges among related households during periods of peak activity, as well as loans of food and other essentials (e.g., tools and seeds) when circumstances so dictate.

The extended family is also the primary economic unit. Farming on a small scale is the principal source of income. All family members who are physically able, play a role in carrying out agricultural tasks. Produce is directed primarily for meeting subsistence needs; and surpluses, if any, are marketed to generate cash. Off-farm, casual day labor, usually performed by the adult males, is used to supplement income generated by farming.

Of the three beneficiary subgroups, the rural village poor has the most rudimentary housing stock. Like their rural town colleagues, housing structures are made of locally available materials and contain much less separation of space (typically, the house consists of one or, at best, two rooms); earthen floors, inadequate ventilation and, in rare cases, potable water and electrical facilities.

C. Income Distribution.

The data base in Bolivia is extremely weak. Since the 1976 Census, there has been no nationwide survey to update information of households. In the absence of current household data, planners have had to rely on estimates in calculating incomes, defining the target population, and estimating demand and affordability. In 1978, when HG 005 ^{3/} program was in preparation, a base-year median was established using a methodology developed by AID and the UN which relies on national accounts and population statistics to indirectly estimate average income and its distribution. The methodology has been further refined by the National Savings and Loan League and has been applied throughout Central America where similar data base problems exist. (See "Preliminary Methodology for Estimating Household Income," AID January 1980).

The Methodology has been applied to Bolivia to establish a new base year (mid-1982) and a preliminary median income estimate for early 1983. The improved availability of household data is an important element in updating the process to permit comparison of results. The National Institute of Statistics (INE) has developed a sample frame for 32 cities and plans to carry out periodic surveys (three to four times per year). The results of the first survey are expected by the end of 1982.

The importance of survey efforts cannot be overly stressed. The methodology for indirect estimates of income is sound, but relies on current and accurate national account figures and population projections. In the case of Bolivia, the accounts are well behind schedule (e.g., final

^{3/} HG 005 -- Refers to Project 511 - HG-005, implemented by USAID/Bolivia and the Savings and Loan Association for Housing of Bolivia.

figures for 1981 may be published by the end of CY 1983). Also, estimates of the total population and work-force vary considerably, depending on the assumptions used regarding overall and regional growth rates, productivity in the agricultural sector, and employment. Household data is the only way to verify the estimates and to correct them if the indirect methodology since there is an 8- to 12-month lag time between data collection and publication of results. Meanwhile, in this highly inflationary period, it is required to update lending and income guidelines relatively frequently. Thus, over the short-term, adjustments should be made using the indirect methodology semi-annually as new national accounts figures become available. The estimates provided below in Table 1 are preliminary calculations which will be adjusted periodically.

TABLE 1

Estimated Monthly Urban Income Distribution 1980-1983 (\$b)

<u>Percentile</u>	<u>1980</u>	<u>1981</u>	<u>mid-1982</u>	<u>beginning 1983</u>
10th	3,108	3,998	6,220	7,906
30th	5,445	7,004	10,898	13,852
50th	8,267	10,635	16,546	21,031
70th	12,618	16,232	25,255	32,101
90th	25,423	32,705	50,883	64,677
Average	12,432	15,993	24,882	31,627

Note: INE defines "urban" as population concentrations of 2,000 or more.

The Ministry of Labor's information on wage scales in the formal sector were reviewed to try to corroborate the figures on estimated household income. However, salaries of formal sector workers provide only a partial picture since the informal sector represents about 60 percent of the work force.

II. SHELTER SECTOR CHARACTERISTICS

GOB efforts to set up public sector housing mechanisms have floundered as a result of a continuous change in personnel and unrealistic financial policies and measures. The Ministry of Housing and Urban Affairs has been unable to develop a workable plan for the most efficient use of scarce resources in the sector, a situation which has been worsened by an almost total ignorance of housing finance issues within the Central Bank and the Ministries of Finance, and of Planning.

The Ministry of Housing and Urbanism (MUV) estimates that the current housing deficit nationwide is over 160,000 units (55,000 in urban areas and 106,300 in rural areas). With new household formations estimated at 24,000 per year, annual production would have to approach 33,000 units each year through the end of the decade to meet the demand. Annual production over the past years has been less than 20% of this level; and it is unlikely that major gains will be made in the near future.

According to MUV, the public sector (BANVI and the various housing councils) built about 16,000 units over the past ten years or about 1,600 per year. With the private sector's past production estimated at 3,000 per year, total production in good years has been about 5,000 units. According to the Camara Boliviana de Construcción, however, with the current economic difficulties and their effect on materials supply and demand, formal sector companies will not build more than 5,000 new units in CY 1982 and CY 1983.

As illustrated in the following table, the growth of the S&L System's lending has been exceptional in the past five years.

TABLE 2

S&L SYSTEMNO. OF LOANS PER YEAR 1977 - 1981

1977	702
1978	1,752
1979	3,205
1980	2,748
1981	4,376

Notwithstanding the fact that the S&L System has initiated new types of credit lines, at least 70 percent of its loans in 1980 (2,000 units) and 1981 (3,000 units) were for new house construction or improvements. This level of lending represents an increase in the S&L System's share from about 40 percent of the total public and private investment in housing in 1978 to over 60 percent in 1981. That level of investment was maintained in the first quarter of 1982, with over 1,000 loans placed, representing close to 700 new units. In contrast, BANVI's production for all of 1981 was only 895 units.

The characteristics of the overall housing stock have not changed significantly since the 1976 Census. Of the existing units in 1976, 67 percent had only 1 or 2 rooms. In the principal cities of the country, a large portion of units were not connected to the municipal infrastructure. Specially, in La Paz, Cochabamba and Santa Cruz, only 42, 22 and 34 percent of these units had water, sewerage and electricity connections, respectively.

The deficits mentioned above and the limited production levels in formal construction have created a housing vacuum which is filled by the informal sector. Marginal areas surround every major and medium-sized city. Some have been in existence for 30 or more years, while others have been formed in the past few years. Because families in these areas often use the materials at hand (e.g., adobe in the altiplano, cane and palm in

lower valleys and subtropics), many of the units are considered "below standard." Of the existing stock, the MUV has estimated that 90 percent of all rural units and 60 percent of all urban units, representing more than 800,000 units throughout the country, should be replaced. This "qualitative deficit" clearly overstates the situation since many of these units can be upgraded instead of replaced.

The HG 005 program in rural towns is one indicator, the results prove that a good percentage of the existing stock is essentially sound and can be converted into safe and comfortable dwellings.

III. ADMINISTRATIVE ASPECTS OF THE SECTOR

A. Present Outlook.

The Bolivian Savings and Loan System represents the country's only significant housing finance institution. The S&L System is composed of CACEN, established in 1966 to serve as its central bank and regulatory agency, and twelve savings and loan associations with histories dating back to 1964. These member S&Ls are located throughout Bolivia's nine departments. Six branch offices are presently functioning, thus providing more extensive coverage of the S&L System's services. Since the early 1970's, the S&L System has been considered one of Bolivia's healthiest and most respected financial institutions. Today, the S&L System has nearly 120,000 savers, accounting for 11 percent of total savings held by the entire banking system. During 1981, 4,376 loans were disbursed by the S&L's, representing over 60 percent of the total public and private investment in housing.

The S&L System is also the only housing institution which has developed a significant capacity to reach low-income families in rural areas. The current housing guaranty program (511-HG-005), initiated in 1979, has been successful in creating a nationwide outreach capability in rural areas.

Low-cost construction designs have been developed to make the shelter solutions more affordable to the target group, and locally produced materials and supplies are being used to greater extent.

Data about borrowers' income for 1981 indicate that more than seventy percent of the S&L System's current portfolio serves families with modest- and low-incomes (at or below the 65th percentile). A full 30 percent of its lending volume is providing benefits to families below the 40th percentile.

Generally, administrative expenses throughout the S&L System relate directly to the experience and strength of each S&L. Administrative expenses for Mutual La Primera, the oldest and largest of the S&L's with 3,800 members and total savings of \$b 369 million, have averaged 2.7 percent of assets over the past few years, while those for newer S&L's, such as La Frontera, Guayaramerin, with 1,500 members and total savings of \$b 4.5 million, have reached as high as 5.5 percent of assets. Though these statistics are certainly high (or low in terms of productivity) by U.S. standards, they are acceptable given the developmental nature of many of the S&L System's activities (e.g., low income housing in rural areas) and the higher overhead costs attached to this type of activity.

CACEN, which maintains regular contact with the associations, organizes training seminars; assists the S&L's with financial planning; and

has been the primary source of investment capital. Its role has been enhanced by the relative autonomy it enjoys with respect to the Bolivian Central Bank (BCB). Under the 1970 reform of the nation's financial legislation, the S&L System was identified as a component of the national financial system; however, appropriate regulations were never drawn up. As a result, the S&L System operates quite independently of the banking system, with CACEN serving as the regulatory agency, secondary market for resources and discount window. In effect, CACEN offers to S&L's financial services similar to those which the BCB offers to the commercial banks.

Despite the S&L System's records for efficiency and growth over the past decade, a number of institutional constraints must be addressed. These constraints involve the lack of financial planning capacity within the S&L System, an overreliance on long-term lending, a dependency on external sources of financing, a lack of reliable information on household incomes, and the poor performance of certain S&L's in confronting the current economic situation.

B. Savings Mobilization.

The S&L System has traditionally registered impressive annual increases in savings generations. Over the past decade, the S&L System as a whole has averaged a 51 percent annual increase in total savings; and, at present, the S&L System accounts for approximately 11 percent of the total savings of the financial system.

TABLE 4
HISTORICAL SAVINGS PERFORMANCE

<u>S&L Association</u>		
(000 pesos)		
<u>Year</u>	<u>Total</u>	<u>% Change</u>
1971	\$b 16,891	
1972	23,563 *	+ 39
1973	35,656	+ 51
1974	81,712	+ 129
1975	98,745	+ 21
1976	190,183	+ 93
1977	296,462	+ 56
1978	381,319	+ 29
1979	550,516 *	+ 44
1980	689,995	+ 25
1981	834,212	+ 21
		<u>+ 51</u> **

The S&L System's past success in generating savings was due in part to the fact that its savings accounts were dollar readjustable. However, since July 1981, GOB imposed stricter foreign exchange controls which effectively removed the BCB's backing for dollar accounts. Now that the S&L System's savings are fully-denominated in pesos and the BCB has established a 30 percent interest floor, which commercial banks must pay on passbook accounts, competition for new savings will be more difficult.

At present, the principal objective for the S&L System, when considering its long-term financial strength, is to increase the savings to replace part of the foreign currency debt it holds. As of December 31, 1981, the S&L System's dollar liabilities represented only 50 percent of its outstanding portfolio. Today, due to the declining value of the peso, these dollar liabilities represent a considerably larger percentage.

However, there exists two important factors which will restrict the S&L System's ability to raise the interest rate paid on savings account, and generate significantly more new savings. First, interest charged on the S&L System's "old portfolio" (loans placed before June 30, 1981) currently average 15.7 percent. Secondly, the demand analysis for new housing

finance indicates that the interest charged on new loans through 1983 should not exceed 38 percent. These two combined factors prohibit the S&L System from paying a savings rate which is comparable to that being paid by the commercial banking system, which currently averages 32 percent.

C. Financial Feasibility of the Lending Institution

The Bolivian S&L System's expansion and its overall financial solvency have been placed in serious jeopardy as a result of the extreme deterioration of the Bolivian economy. Similar problems are being confronted by S&L's in other countries. While the S&L System's financial structure has served it well in the past, it was never designed to be able to adjust to and survive in an economy characterized by high inflation, rapid devaluation of the local currency and abrupt changes in the country's monetary policies. Since July 1980, the economy has declined significantly and the government has been slow to effectively address basic structural deficiencies. These deficiencies include over-centralization, internal price subsidies, poorly-administered state enterprises, failure to control public spending, and high inflation. The Bolivian economy in 1981 had a real decrease in Gross Domestic Product (GDP) of between 0.6 and 2.0 percent (preliminary data), with per capital GDP falling to \$287.7 (constant 1970 dollars), reflecting a declining trend which began in 1979.

Insufficient GOB economic planning capabilities has added to this economic slide and has led to critical foreign exchange shortage, which required the imposition of exchange controls on July 30, 1981. These controls, in turn, have caused an acute foreign currency scarcity in the

private mining, commercial and industrial sector, and growing recession and unemployment. In an attempt to put its economic house in order, and in response to international agencies' advice, the GOB dictated a series of economic measures in February and March 1982, including: the establishment of free market interest rates, the lifting of certain price subsidies, the devaluation of the peso by 26 percent with respect to the dollar; and subsequently, the introduction of a legal free parallel market for the overvalued peso. The official exchange rate of 44 pesos to the dollar was limited to central government debt and 40 percent of exporters' foreign exchange earnings. All other exchange requirements had to be met on the parallel market which has risen as high as \$180/dollar.

The overall economic crisis faced by Bolivia in the last two years has had a severe impact upon the S&L System. The S&L System in Bolivia is currently facing the threat of financial collapse, due primarily to the sharp decline in the value of the peso relative to the dollar. Prior to the enactment of Decree Law No. 19027 on June 30, 1982, the S&L System operated its portfolio on a fully-readjustable dollar equivalency. Together with its membership, it was able to absorb losses due to previous declines in the value of the peso relative to the dollar. Thus far, during 1982, however, the peso declined from an exchange rate of \$25/dollar to \$180/dollar, a drop of some 620 percent. Without a major restructuring of its operations along with outside assistance, a continuation of this situation would lead to the almost certain collapse.

Decree Law No. 19027 permitted the S&L System to make a partial readjustment of its portfolio before converting from a dollar readjustable system to a full peso one. Based on this Decree Law, CACEN called for a 76 percent readjustment of both mortgages and savings (which corresponds to the official rate of \$44/dollar, the rate of exchange for central

government transactions). The readjustment losses were absorbed by the S&L System's borrowers (12%) and by the S&L's as a group (88%). By comparison, the S&L System absorbed about half of the readjustment losses incurred as a result of the October 1972 devaluation and almost none of the losses in the November 1979 devaluation. In 1982, based on an external dollar debt of nearly \$30 million, the S&L System has been forced to absorb a paper loss of nearly \$3.5 billion, which at an exchange rate of \$180/dollar amounts to over \$19 million.

The critical question at the present time is whether or not the S&L System can continue to operate and absorb the \$19 million reduction in its assets. An analysis of the ability of the S&L System to avoid decapitalization was made by simulating cash flows for CACEN and the S&L's with the assumption that no new loans would be forthcoming, and that the conversion to a full peso system and the diversification of the S&L System's portfolio would continue. The analysis was based on a variable interest rate on both new lending and the existing portfolio, with new loans requiring higher interest rates than existing loans, savings deposits earning a variable interest rate, a projected increase in the volume of saving deposits of 20% per year, and a fixed proportion of administrative costs of the loan portfolio assessed to each S&L. Using these projections, the analysis showed that the S&L System as a whole registered a negative cash flow starting in 1983.

TABLE 5

CASH FLOW SUMMARIES FOR THE S&L SYSTEM WITHOUT HG 007 (\$B BILLIONS)

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
<u>Caja Central</u>					
Income	.348	.337	1.404	1.096	1.266
Outlay	.284	.265	1.396	1.084	1.293
Surplus	.064	.072	.008	.012	(.027)
<u>S&Ls</u>					
Income	.883	1.023	1.896	1.553	1.528
Outlay	.771	.872	1.884	1.585	1.804
Surplus	.111	.151	.012	(.032)	(.277)

From the cash flows summarized above, it is clear that the S&L System would not be able to remain in operation beyond 1984. Due to its negative cash flow, the S&L System would be forced to curtail its lending activities which, in turn, would lead to a rush by savers to withdraw their deposits. Liquidating assets would not be sufficient to meet the S&L System's external debt requirements and, at the same time, comply with savers' withdrawal demands. S&L's would have no choice but to close their doors and suspend operations.

Simulations of the impact of the injection of the peso equivalent of \$10 million in new resources were run by both CACEN and USAID/B. These simulations included the most likely occurrences for over twenty variables which might affect the cash flow positions for each S&L. The variables of primary interest include: the peso/dollar exchange rate (an average rate of \$b150/dollar for 1982 was used with a 25% annual devaluation of the peso thereafter; the actual average 1982 rate through August was \$b87/dollar

the interest rate to the borrower under the old portfolio, i.e., loans placed prior to June 30, 1982 (an average of 15.6% in 1982, 26% in 1983, 33% in 1984, 37% in 1985, 41% in 1986 and so on); the interest rate to the borrower on new loans (35% in 1982 and rising to 47% by 1986) annual growth in savings generation (20%); amortization periods of 15 years between CACEN and the S&L's with no grace, and interest rates of 17 percent on the peso loans from the BCB to CACEN and 19 percent on the CACEN's loans to the S&L's. Based on this exercise, it is clear that with a new loan the entire S&L System could avoid decapitalization through 1991 and beyond (See Table 6).

It should be noted that the results of these cash flow simulations were based on the assumption that the additional measures would be taken in order to assure the long-run viability of the S&L System. Thus, while the new resources will assist the S&L System in avoiding decapitalization over the short run, they will also provide the S&L System with the necessary time to implement a series of additional measures to insure its long-term viability. Various of these measures were taken into consideration in the elaboration of the cash flow simulations summarized above. Others could be used as needed, depending on the economic conditions which exist at the time. In general, the measures will provide the S&L System with the flexibility it requires to maintain its viability given a whole range of possible scenarios.

The measures are as follows:

a. An increase of the amortization grace period and/or decrease in the interest rate on repayments of the external dollar debts of the S&L's to CACEN (the cash flows include a three-year extended grace period on the old loan portfolio for five of the S&L's most affected by the current economic situation - La Frontera, Manutata, Tarija, Potosi and Cochabamba);

- b. An increase of the amortization period and/or decrease in the interest rate on new loans provided by CACEN to the S&L's;
- c. An increase in the interest rates the S&L's charge to borrowers on the repayment of the old loan portfolio. (Due to the 76 percent readjustment of loan balances on June 30, 1982, the S&L System chose not to raise interest rates, which average 15.69 per cent, on its 'old' portfolio until January 1, 1983. See the description above of how these interest rates rise over time according to the cash flow simulation);
- d. A disbursement of the new HG resources as rapidly as possible. (Cash flow simulations are based on strengthened institutional capacity of the S&L System, which will permit the full disbursement of the new resources over the three-year life-of-project);
- e. An increase in the interest rates for new lending activities. (S&L's are currently charging between 33 and 38 percent interest on new loans);
- f. An increase in the rate of growth of savings deposits. (It is expected that savings in the S&L System as a whole will grow nominally by at least 20 percent per year. A condition precedent to initial disbursement will require that a savings mobilization plan acceptable to AID be submitted. Annual evaluations and short term technical assistance will measure progress being made in this area and make recommendations on ways savings generation can be improved);
- g. The liquidation of tangible assets in a more expedient manner. (While this option is not recommended except for emergencies, the S&L System does possess certain investments in land, improved lots and buildings which could be sold off in order to preserve the S&L System's liquidity);

h. The creation of a reserve within CACEN to be used for loans to troubled S&L's on a lender-of-last-resort basis. (This would ease the transfer of resources from healthier S&L's to weaker ones in times of need);

i. The lowering of interest rates between the BCB and CACEN for peso loans based on the new \$10 million. (While cash flow simulations have been based on the BCB lending the equivalent of \$10 million in pesos to CACEN at 17 percent interest, the rate currently employed for lending to intermediate credit institutions for various development credit lines, an agreement has been reached with the BCB which will provide for annual evaluations in order to determine the desirability of lowering the interest rate and thus increasing the spread required by the S&L System to meet its outstanding dollar denominated obligations. Lower BCB interest rates could also permit the S&L System to provide loans with lower monthly installments, thereby insuring demand among the project's target group. Although lower rates imply a direct subsidy to the S&L System, the BCB will simultaneously be lending the dollar resources at commercial rates in order to generate sufficient reflows over the life of the project to honor its debt obligations under the new loan agreement); and

j. The diversification of the S&L System's portfolio. (Decree Law 19027 authorized a diversification into housing and family-related short-term lending. Although some S&L's have already embarked on a diversification program as long as a year ago, these new lending activities will provide the S&L System as a whole with an added flexibility in managing its portfolio, increased income, and a greater opportunity to attract new savers).

IV. THE TARGET POPULATION'S CAPACITY TO PAY

Determining the proportion of income that a family can or should set aside for housing is, at best, a theoretical exercise. For HG 005 program, great care was taken to maintain payment levels below 25 percent of income. It is generally believed that lower income families cannot pay proportionately higher amounts for housing without reducing other basic necessities. Studies in other countries ^{4/}, however, have shown that low-income families pay higher proportions of income on housing than families in upper-income categories. In general, these statistics demonstrate that (1) it is not uncommon for families below the median to pay up to 40 percent of their income on mortgages and housing below the median to pay up to 40 percent of their income on mortgages and housing related costs, while wealthy families dedicate 10 percent or less to housing, and (2) families are willing and able to sacrifice when they are offered ownership rights and an opportunity for a more comfortable home. Unfortunately, similar studies have not been carried out in Bolivia. Some information exists on rental prices for past years, but it has never been correlated with income. A large part of the "owners" (70 percent of the households are classified as owners) were originally squatters and, although their tenure status may have been clarified, a formal purchase transaction did not take place. Therefore, estimating patterns of purchase price and income for low-income groups is not possible.

Based on discussions with representatives of the 12 S&L's, however, it is clear that the investment capacity of low-income groups is quite high

^{4/} For illustrative studies, see the "Torrijos-Carter" and "Roberto Duran" Projects in Panama, Ministry of Housing, 1981.

and clearly surpasses 25 percent of monthly income in most cases. Throughout the S&L System, borrowers tend to prepay their loans, including HG 005 beneficiaries having the least payment capacity. System-wide, borrowers pay off their loans in 60 percent of the time contracted (e.g., 13-year loans are paid off in eight). The average repayment period for the entire System is 8 years, even though loan terms may be given for as long as 20 years. The prepayments are often regular and are generally augmented when workers receive extra bonus salaries. For example, a borrower may make two payments each month and, at the end of the year, make six more, depending on the number of additional salaries received.

In another example, the World Bank has financed a series of upgrading projects in areas surrounding La Paz. The installation of infrastructure (water, sewerage, and roads) costs the beneficiaries about 10 percent of their incomes. Where this upgrading has been completed, the communities' housing stock has undergone an extraordinary transformation (i.e., 90 percent of the houses have been expanded and improved; sidewalks, retaining walls and stairs have been built through communal efforts in a period of less than two years). While regular payments are only 10 percent of income, the amount of additional investments by the families in this short period clearly demonstrates a payment capacity well above the estimates of project designers.^{5/}

Accordingly, the estimated payment capacity for most borrowers has been set at between 30 and 35 percent of monthly income. This guideline may still be conservative, but is clearly more realistic than the 25 percent used previously, except for the beneficiaries of the lowest end of the scale. Given the general conditions of the lending which is planned

^{5/}The average income at the time the projects were initiated was about \$5,000 per month, well below the median.

in CY 1983 by the S&L System, an illustrative breakdown of income, payments and loan amounts is provided below:

BORROWERS' MONTHLY PAYBACK CAPACITY BY INCOME PERCENTILE

<u>Percentile</u>	<u>Income Per Month</u>	<u>Monthly Payments *</u> (30-35%)	<u>Loan Amounts</u>
50th	\$b21,000	\$b6,300-7,350	\$b188,800-220,300
30th	\$b13,800	\$b4,140-4,830 (25%)	\$b124,100-144,750
10th	\$b 8,000	\$b2,000	\$b 59,900

*By percent of monthly income used for housing finance. Estimates are based on loan terms of 8 years at 38 percent interest.

Questions are usually raised about the risk of defaults as the proportion of income used for housing is increased and conditions of loans become more difficult. In general, the S&L System has demonstrated its care in determining beneficiary payment capacity, as well as its flexibility in formalizing payment arrangements with beneficiaries. The present situation is the most difficult in terms of collections, since the recently announced 76 percent readjustment in principal of all loans was retroactive to February 1982. On paper, therefore, arrearages immediately jumped 50 percent or more in many of the S&L associations. In this regard, special arrangements are presently being made to bring borrowers up to date over time. In the future, this problem will be more manageable, since only interest rates will vary and there will be no further dollar readjustments. In the case of interest rates, the associations are adjusting the terms of the existing portfolios slowly over time, rather than placing them immediately on a par with the new lending rate, which is between 33 and 38 percent.^{6/} This is expected to prevent defaults, since incomes are

^{6/}By 1983, it is expected that the overall rate for the existing portfolio will be about 25 percent, a 10 percent increase over the existing rate.

increasing at a sufficient rate to cover the gradually increasing mortgage payments.

V. COMMENTS ON THE AFFORDABILITY OF SHELTER SOLUTIONS TO BE FINANCED UNDER A NEW LOAN

As has been the case with earlier programs carried out by the Bolivian S&L System, a new loan would provide for the development of a variety of housing finance arrangements, many of the same types of home improvements developed under HG 005. These include very low-cost housing finance arrangements, such as the "Type A" ^{7/} loan (average amount \$530 or \$80,000) as well as the somewhat larger "Type B" home improvements loan (average amount \$1,600 or \$240,000). While changes in the exchange rate complicate direct cost comparison, comparable improvements would represent an important component of the undertakings financed with the new loan.

Information available on the materials used in the construction of houses in La Paz, Cochabamba and Santa Cruz, the largest cities in the country, indicate that home improvements could affect various structural elements as can be appreciated by the following breakdown of house construction by materials for floors, walls and roofs.

^{7/}"Type A" loans are for small home improvements directed toward families in small dispersed rural communities at or below the 20th income percentile. "Type B" loans are for intermediate home improvements directed toward families in rural market town at or below the 50th-income percentile.

TABLE 3
Breakdown of Home Construction by Materials Used

<u>City</u>	<u>La Paz</u>	<u>Cochabamba</u>	<u>Santa Cruz</u>
<u>No. of Units</u>	340,414	147,317	110,066
<u>Floor Material</u>			
Wood, cement, tile or brick	39.6%	34.4%	61.2%
Dirt	60.4%	65.6%	38.8%
<u>Wall Materials</u>			
Cane, palm, trunks	2.1%	4.2%	11.5%
Adobe	90.2%	83.0%	32.8%
Brick, cement or rock	6.9%	11.5%	47.0%
Wood	.8%	1.3%	8.7%
<u>Roof Materials</u>			
Zinc, tile or cement	70.4%	60.2%	74.7%
Cane, straw	29.6%	39.8%	25.3%

Lending would be for a variety of home improvements as well as for the construction of new core units in rural areas. They would include.

- Repair/replacement of roofs
- Repair and weatherproofing of walls
- Upgrading of dirt floors
- Construction of potable water sources (wells)
- Construction of sanitary disposal facilities (latrine and septic systems,
- Connections to potable water systems
- Installation of bathing and sanitary facilities
- Addition of new rooms
- Installation of electric services
- Partition walls
- Home finishing loans
- Combinations of above improvements

Anticipated costs for activities carried out under new loans have been determined by utilizing July-August 1982 unit prices of those construction materials most used in low-cost upgrading projects and the development of

TABLE 8

SUMMARY CASH FLOW SURPLUS BY INDIVIDUAL ASSOCIATION WITH HG 007 ^{1/}
(\$b millions)

<u>Savings & Loans Associations</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
La Primera	2,375	2,559	15,579	2,949	8,230	5,763	8,863	16,555	220	(146,627) ^{2/}
El Progreso	622	1,400	2,770	4,023	5,424	9,146	8,974	17,987	28,344	46,818
Tarija	1,417	3,648	5,641	2,152	4,595	5,132	11,574	16,435	25,332	33,644
Potosí	204	1,491	6,314	985	3,094	4,218	846	7,518	8,440	6,499
Guapay	2,249	6,639	11,244	14,300	25,750	40,127	67,124	103,736	177,986	222,841
La Promotora	1,738	3,521	6,400	11,305	12,007	21,329	32,309	53,799	89,325	142,325
Manutata	698	2,683	4,301	3,754	3,753	6,768	11,502	18,262	27,627	27,023
La Frontera	359	1,436	1,324	1,948	2,611	3,154	4,598	9,038	8,985	13,898
Pando	427	1,607	2,193	4,124	5,367	5,296	10,316	15,789	27,360	44,986
Paitití	1,368	4,211	8,893	9,060	14,489	13,235	25,820	37,421	62,260	96,296
La Paz	2,287	3,416	7,180	8,665	7,567	4,947	7,093	6,058	16,604	51,955
La Plata	205	1,559	2,438	4,426	1,039	2,022	1,709	3,530	4,700	6,422
CACEN	12,047	10,686	11,084	14,078	2,578	14,579	6,944	25,708	11,287	18,660

^{2/} While the La Primera S&L becomes decapitalized in 1991, the surplus for the S&L System as a whole is more than sufficient to assist La Primera in taking necessary measures to recover.

low-cost units and some improvements recently financed by the S&L System, seventeen "typical" improvements/core units have been costed out for Bolivia's four main geographic regions (i.e., La Paz, North, South, Valley). The affordability of the housing alternatively by families in varying income percentiles, assuming payment of 25, 30, and 35 percent of family income for the amortization of the corresponding loans, which will be lent initially at a 38 percent rate interest with a ten-year repayment period, is provided below, showing six alternatives and presenting their affordability by geographic areas and income percentile range. (See Table 8)

An examination of the high construction costs relative to the affordability constraints suggests that relatively few new housing units would be built. New units to be financed are expected to be starter-units, designed for future expansion as the beneficiary family's income improves over time. Experience with the HG 005 program demonstrates that considerable reductions in costs are achieved through the use of locally-available materials and self-help efforts. Thus, it is to be expected that there will be some modest new housing units financed by the new loan, especially in rural areas where low-cost materials are readily available and where patterns of work and free time are propitious for self-help activities.

With respect to activities in urban areas, loans will be primarily for upgrading existing shelter stock as well as for the construction of some new units. It is expected that the construction of small core units, both in rural and urban areas, will constitute a significant element in the mix of solutions financed by the new loan. Recent rapid price increases have pushed the costs of even modest core houses to a level with is, at this time, out of reach of most families with incomes at or below the median. However,

AFFORDABILITY BY AREAS AND INCOME RANGE

TABLE 9

Item to be Financed	LA PAZ			NORTH			SOUTH			VALLEY		
	INCOME PERCENTILE			INCOME PERCENTILE			INCOME PERCENTILE			INCOME PERCENTILE		
	0-10	10-30	30-50	0-10	10-30	30-50	0-10	10-30	30-50	0-10	10-30	30-50
1. 24 m2 core unit			Yes						Yes			
2. Construction of additional room of 12 m2		Yes	Yes			Yes	-	Yes	Yes			
3. Construction of a bathroom with toilet, sink and shower		Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes
4. Home Improvement: 28 m2 roof and 24 m2 wood floor (8 year loan)	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes
5. Home Improvement: Installation of electric system (5 year loan)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6. Home Improvement Loan: Installation of water system from street lines (1 year loan)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

- Assumptions:
1. Term of loan 10 years unless otherwise shown.
 2. Interest rate at 38 per cent per annum.
 3. Loan finances 100 per cent of improvement/construction (more costly undertakings are possible, with a contribution by the borrower)
 4. Income percentiles per January 1983 projections.

it is expected that incomes will rise over the next few years, at a rate greater than the increases in the costs of construction materials. Thus, over the life-of-project, the payment capacity of the target group is expected to "catch up" with the construction costs which surged in the first half of 1982 and by the second or third year of project implementation, a shift toward the construction of more new units should be in evidence.

NOTE: This paper is based on documents related to the subject prepared by the USAID Bolivian Mission.

FOURTH ANNUAL INTERNATIONAL SHELTER WORKSHOP FOR SENIOR PROFESSIONALS.
OFFICE OF HOUSING AND URBAN DEVELOPMENT
AGENCY FOR INTERNATIONAL DEVELOPMENT (AID)

COUNTRY : EL SALVADOR

SETTLEMENT UPGRADING PROGRAMS AS AN ALTERNATIVE TO SLUM CLEARANCE.
THE URBAN HOUSING INSTITUTE EXPERIENCE.

PRESENTED BY :

COSME VALDEMAR DURAN
JUAN JOSE GOMEZ

OCT. 25th - NOV. 19th /1982

WASHINGTON D.C.
U.S.A.

I

INTRODUCTION

Since the fifties, El Salvador started to experience a new way of population growth, normally called migration. This particular kind of people mobilization, was provoked by the industrialization of the capital city of San Salvador and brought thousands of people from rural areas to urban cities, looking forward to better their opportunities and improve the life level of their families. This mobilization was never stopped, because rural families leaving away all their rights and properties (if they have), look for peaceful places where to live and work. The last statement due to their localization in critical zones.

This population and their normal human needs, increase the demand for services, that normally are place to limited capacity, so that, the demand for services increase to a very high level bringing with it, social problems due to sanitary services, water services, garbage disposal, shelter areas, health and education facilities, etc. of the people already living in these cities and of those who come to settle in such conditions.

El Salvador case related to urbanization of the cities and the decrease of the population in rural areas, is not unique in the world, because people normally seek to improve life conditions and many of them come to big cities to achieve their thoughts.

To our experience population movement has ever happened and is still happening in many countries. But, the question is, What shall we do, the problem is there.

Our objective through this paper is to show you, how El Salvador, by Urban Housing Institute and other related agencies are giving solutions to people establish in slum and squatters areas.

II

BACKGROUND OF EL SALVADOR

El Salvador is one of the Central American countries. It has a rectangular shape measuring 21,000 Sqk, having a maximum width of 62 miles.

Bound to the North with Honduras, to the South with the Pacific Ocean to the west with Guatemala, and to the East with Nicaragua and part with Honduras.

According to recent information, the population is over 4.5 million people and population density came to 222 people per square kilometers.

Economic data shows that the GNP arrived to \$3,424.2 million in 1981 and the per-capita GNP is \$732.8 for the same year.

The last Housing Census 1971, showed that 680,400 dwelling units were censused, corresponding 283,400 dwelling units to the urban sector and 397,000 dwelling units to the rural sector.

El Salvador is an agricultural country, and the main crops are coffee, sugar cane, and cotton. Some other industries are shrimps, corn, beans, rice, some of them for foreign trade and some, for internal consumption.

The administrative division of the country is 14 provinces, corresponding 3 for the east zone, 3 for the west zone and 8 for the central zone.

Some details about El Salvador are shown in charts at the end of this paper.

III

SECTOR STRUCTURE

The different agencies who have to focus on housing problems and related services are:

Vice- Minister of Housing and Urban Development.

This Vice-Ministry is integrated to the Ministry of Public Works and is in charge of the housing policy in El Salvador. It has the General Direction, coordination and regulation of Urban development plans and projects, including related studies to financing, land use, urban plan, provision of services, popular participation, construction techniques, building materials, rational use of resources.

The public sector as well as the private one have to deal with the physical execution of the projects.

The public sector is represented by the following institutions:

FINANCIERA NACIONAL DE LA VIVIENDA (FNV)

Created in 1963, regulates the saving and loan Associations and utilize and promote savings to finance short- term loans, for private builders and por house buyers through long term loans applying the mortgage sistem.

Up to now, FSV has financed about 12.000 dwelling units.

INSTITUTO NACIONAL DE PENSIONES DE LOS EMPLEADOS PUBLICOS (INPEP)

Founded in 1975, its objective is to provide social security to public servart, such as pensioner, etc. according to law, some 75% of its technical reserve has to be used for housing purposes.

Being like that, economic resources come salary deduction of public servant, and through this financed a long-term loans. More than - 6000 houses have been financed by INPEP.

INSTITUTO DE VIVIENDA URBANA (IVU)

Named in this paper Urban Housing Institute, was founded in 1950, having executed more housing projects than any other public or private company. More than 30.000 dwelling units have been produced - using the long-term loan for low income people.

The economic support come from house rents governmental subsidies and foreign loans. Since 1970 IVU has started the slum clearance by a prototype project, but it was until 1981 that IVU had the legal support to settlement upgrading and slum clearance.

Due to IVU's facilities, actual government has given some importance to IVU, so that this entity will deal with rural housing for 1983, using international funds there are private companies who also dealt with housing needs in El Salvador, such as:

BANCO HIPOTECARIO DE EL SALVADOR

Created in 1934, finance housing projects for builders and short-term loans for builders and long term loan for buyers.

FUNDACION SALVADOREÑA DE VIVIENDA MINIMA (FUNDASAL)

Is a non-profit, private institution, whose objective is to promote better life for the community through housing projects, including cooperatives organization, use of mutual help and self-help systems, site and services projects.

This programs focus on low income people specially those who live in squatter areas.

More than 15.000 families have had the assistance of FUNDASAL through this programs.

There are several private builders who invest in the housing sector, normally for medium and high income level.

They develop the infrastructure and other services, but they have to be regulated by other related governmental agencies.

ADMINISTRACION NACIONAL DE ACUEDUCTOS Y ALCANTARILLADOS (ANDA)

This governmental agency has to deal with sewerage system for potable and served water. It is an autonomous agency whose funds come from government subsidies, own resources and foreign loans.

This agency regulates the water system and the consumption of it.

DIRECCION GENERAL DE URBANISMO Y ARQUITECTURA (DUA)

This is an office dependent upon the Ministry of Public Work and give special attention to projects approval, and when projects are completed, it receives them also give regulation for building sites, planning permission urban development projects, and so on,

There are, of course other private and municipal offices such as CAESS (for energy purposes), CEL (for the same reason), mayoral (for rubbish disposal), transport office (for transport facilities), ANTEL (for public and private telephone service), education Ministry (primary and secondary schools), health Ministry (Health facilities), etc. these offices are for the provision of community and public services mentioned above, and they have to coordinate their functions with housing entities in order to supply the minimal needs for urban projects.

IV

BRIEF DESCRIPTION OF EXECUTION AGENCY URBAN HOUSING INSTITUTE (IVU)

Urban Housing Institute is the pioneer agency for the assistance to housing problem.

It was born in 1932 as a "Junta Nacional de Defensa Social" with very limited success.

In 1945, according to legal regulation changed the name to "Mejoramiento Social", and five years later in 1950, based still on Mejoramiento Social Organic Law, changed to become Urban Housing Institute (IVU) and Rural colonization Institute (ICR); the first entity had to deal with urban housing needs and the second entity, to deal with rural housing conditions.

IVU started its experiences in 1950 and since that time has provided shelter and communitary services to more than 30,000 families belonging to low and middle income level.

According to Creation Law, IVU's objectives were adressed to low and medium income level, providing families with complete detached houses in urban zones. Following the urbanization process of San Salvador capital city, people started to squat on vacant government land or vacant private land, road sides, old houses, non-urbanizables areas, etc.

Housing conditions became worse when in 1965 an earthquake, had serious effect on old houses, or houses without minimum standard to San Salvador city because of sismical conditions of the zone.

Since the early seventies, IVU started to build high-rise building, complete, multistory.

This efficient utilization of the land was according to the limited area of El Salvador so that, since 1970 IVU started to think of the future shortage of urbanizing land and at the same time, the agricultural needs of people.

The establishment of families in illegal areas, slum was the result of rural migration and IVU in 1971 gave the first step in attending this problem.

For 1971, IVU had already initiated three different projects on housing sector:

- Detached houses
- Multi-family complexes
- Settlement upgrading.

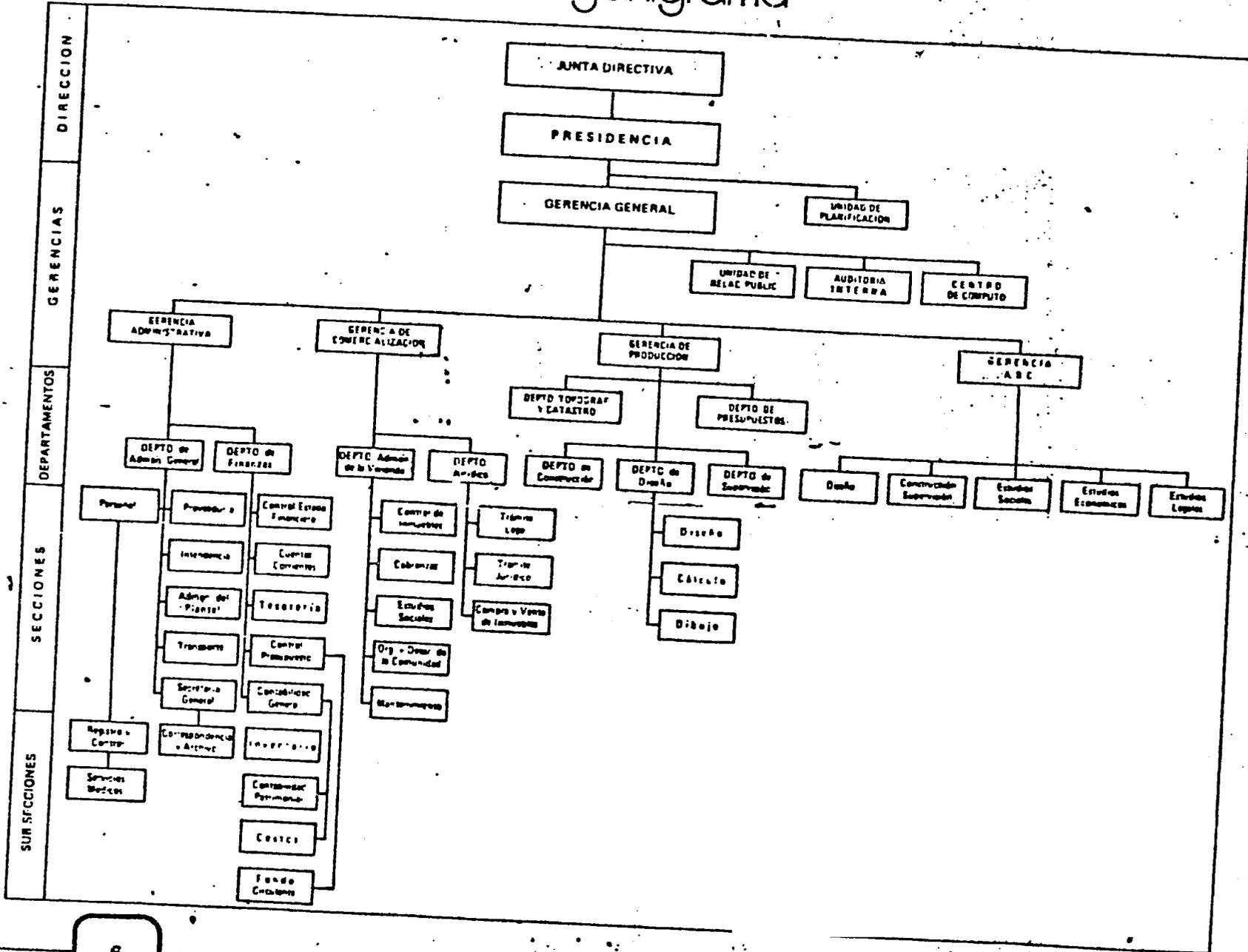
Now in 1982 IVU has more experience than any other agency, and it is mentioned that in 1983 IVU will also deal with rural housing.

IVU'S ACTUAL ORGANIZATION

The following chart shows the organizational structure of IVU.

(SEE NEXT PAGE)

organigrama



IVU is an autonomous agency depending upon the Public works Ministry, but due to the main guidelines of their policies, has extreme relationship with housing and Urban Development Ministry.

The Board of Directors are appointed by the Planning, Finance, Economic, Interior and Health Ministries.

IVU's President is appointed by the Ministry of Public Works.

OBJECTIVES AND RESPONSABILITIES

According to Creation Law IVU has one objective that to my point of view, try to encircle many of them:

- Build economic, higienic and comfortable houses for low and medium level families.

To achieve these main objective IVU has responsibilities, and within them it can be mentioned the following:

- Designing of housing units and multistory building according to economic level of people.
- Searching and development of building techniques
- Design of housing spaces and open spaces according to human needs.
- Acquisition of land for future projects.
- To Develop master plan including areas for commercial activities, medical and educational facilities, public hall, playgrounds, small shops, parking lot, nurseries, post offices, goverments offices (according to the size), transport facilities and water and sewerage systems.
- Carry ont market survey for determining housing demand.
- Plan, program, execute, coordinate and control housing projects,
- To provide economic support to housing projects, in order to finance the various activities imply in these projects.
- To rationalize the use of resources, such as human, materials, economic, time, etc.
- To develop different tipe of dwelling units for different income level,
- To provide maintenance to already existing houses, according to creation law.

- To promote the urban renewal projects, by demolishing, relocate or upgrading settlement.
- To carry out projects in order to help for other governmental policies such as: employment, investment, demand, stop price rising, production, etc.
- To make the most rational use of dwelling units, giving them to families with housing pressure.
- Preparation of guidelines in order to stop the land price rising.
- To meet people needs through social promotion, community welfare programs and social workers aid.

IVU'S ANNUAL BUDGET

In Annex N^o 6 we can see IVU's budget since 1978 to 1982, according to budget program. IVU has four Budget programs, numbered as follow:

- 101: Administration and Marketing
- 301: Building of Houses
- 302: Access to Community welfare ^{1/}
- 501: External debt service

IVU's funds come from government subsidies^{2/}, foreign loans, internal loans and housing rents.

Very recently IVU has signed a contract for the use of external loans from private investors through AID grant.

1/ Created in 1980

2/ Last Government Subsidies were in 1980.

SETTLEMENT UPGRADING EXPERIENCE

According to IVU's experience the approach to settlement upgrading focus on two fundamental steps:

- 1) Provide shelter according to physical conditions of the land, social and economic capacity of the settlers, and human conditions of the inhabitants.
- 2) To utilize the permanent aggressive attitude of the settlers, due to the way they have established. Those establishment conditions set them in a non-stop decision of improvement.

Their social conditions are normally bad, suffering from diseases, specially children; living between garbage, low sanitation level, but they always keep in mind a positive mental attitude for improvement for themselves and their families.

The first step is objective, can it be measured by physical results. IVU start rebuilding infrastructure, that is, potable water, sewerage system, removing pipelines.

It follow the building of foot paths, pedestrians walks, side walks and some collective services (latrine, public bath) then, according to family income IVU come to build progressive houses, and in some cases complete detached houses.

Of course, this first step include the provision of health and education facilities, sanitation, small enterprises loans, provision of jobs, legal conformation of families, etc, all that in coordination with other related agencies whose objectives are the mentioned above.

The second step, is the basic problem of social workers, who have to face and maybe to live in such conditions, so that they become to understand quite a bit, how this people feel, how they react, what are their thoughts. The social attitude of social workers has primary importance to get to know and to get along with this families. The participation of the people in their own decision is the last step to carry out the experience and the positive attitude they

keep with them and for them.

To my point of view, this is a subjective situation that one is able to take into account depending upon the method you use to obtain the people aid and experience.

Once you have surpassed this barrier everything become easier and projects runs faster.

El Salvador first experience in settlement upgrading was in 1971, and the name of the project was Acaxual, located in the port city of Acajutla, away from the capital city of San Salvador about 50 - miles south west.

Being a port and a commercial/^{city}for foreign trade, Acajutla suffered from migration of hundred families who came to settle in slums areas, near the beach, flooding area, municipal lots, etc.

All these areas lacked of minimal human services and to the eyes of anyone interested in housing, needed to be redeveloped.

There were various alternatives for upgrading, the chosen one was according to social and economic characteristics of the families. The first attempts were addressed to improve the infrastructure, - giving special attention to land tenure and site redevelopment.

Besides that, IVU gave special attention to build new houses through technical assistance of special personnel, while people using the self-help method built their own houses.

Other features were:

last area	80 sq.
cost	\$680
Target group	600 families
rent	\$4.00 - \$6.00
period	20 years

Since there was an evaluation of the project and it showed the success of it, people start calling IVU for new redevelopment or settlement upgrading.

It is necessary to remember that there have been various documents whose main recommendations were focused on upgrading projects.

The objectives to be achieved in the new settlement upgrading are:

- 1) Promote the access to the ownership of the land, because most of the people who live in these areas, are not owners of the lot - where they live.
- 2) Improve the infrastructure and public services such as: water supply, improve sewerage system garbage collection, redevelopment of existing roads and footpaths, public light, public hall and other related facilities.
- 3) Increase the personal capacities, wake up people abilities giving them more social opportunities.
- 4) Increase the workers productivity, through the employment generation using labor force of the area, giving them the opportunity to obtain some income.
- 5) To back up small enterprises in the areas, with the expectation of new jobs generation, new incomes resulting a greater local - market for goods and services.
- 6) Promote educational services, health services in order to develop an improvement of life level for inhabitants of these communities.
- 7) Prepare human resources for communal organizations, so that people can participate and cooperate in the solutions of their own communities.
- 8) Protect the environment through the conservation of ecological - systems.

It is important to remain that in order to achieve the complete objectives of projects, it is necessary to integrate various institutions which will have to follow IVU's guidelines; as follow.

- 1) Urban Housing Institute (IVU)
 - a) Coordination and Direction of Projects
 - b) Planning and execution of social activities and physical development of projects.

- 2) Federación de Cajas de Crédito (FEDECREDITO)
 - a) Carry out small industries loan projects.
- 3) Education Ministry
Labor force and education projects to be developed for inhabitants of these areas.
- 4) Health Ministry
Medical education and environment protection programs
- 5) Public Works Ministry
Projects through ANDA and DUA, such as:
 - a) Integration of new roads to existing one
 - b) Integrate of potable water system and sewerage system to existing one.

Of course, IVU will have to deal with the legal tenency of the lot, and IVU is prepaing special personnel and other various activities to achieve the transfer of property to the people. This activities are adressed to secure the land tenure so that people can develop their ideas in a better way, because they know land belong to them.

ANNEX No 1

P O P U L A T I O N

(Thousands of inhabitants)

1977 - 1981

El Salvador

Year	Population	URBAN	%	RURAL	%	TOTAL
1977		1734.5	41.7	2425.0	58.3	4.159.4
1978		1790.1	41.8	2492.4	58.2	4.282.6
1979		1843.1	41.8	2566.2	58.2	4.409.4
1980		1902.0	41.9	2637.5	58.1	4.539.5
1981		1963.0	42.0	2710.2	58.0	4.672.9

SOURCE: MIPLAN

ANNEX N° 2

NUMBER OF DWELLING UNITS
(1 9 7 1)
AREA, PROVINCES AND TOTAL (THOUSANDS)

PROVINCES	RURAL	URBAN	TOTAL	RURAL %	URBAN %	TOTAL %
Ahuachapan	25.8	8.8	34.6	6.5	3.1	5.1
Santa Ana	37.7	29.0	66.7	9.5	10.2	9.8
Sonsonate	28.8	18.7	47.5	7.2	6.6	7.0
Chalatenango	23.3	9.7	33.0	5.9	3.4	4.9
La Libertad	34.9	20.2	55.1	8.8	7.1	8.1
San Salvador	31.8	111.9	143.7	8.0	39.5	21.1
Cuscatlán	21.2	8.4	29.6	5.4	3.0	4.4
La Paz	24.0	11.2	35.2	6.0	4.0	5.2
Cabañas	18.9	4.4	23.3	4.8	1.5	3.4
San Vicente	19.0	8.3	27.3	4.8	2.9	4.0
Usulután	38.9	16.4	55.3	9.8	5.8	8.1
San Miguel	38.9	21.3	60.2	9.8	7.5	8.8
Morazán	23.6	5.8	29.4	5.9	2.1	4.3
La Unión	30.2	9.3	39.5	7.6	3.3	5.8
T U T A L	397.0	283.4	680.4	100.0	100.0	100.0

SOURCE : HOUSING CENSUS 1971

ANNEX Nº 3

**DWELING UNITS
ACCORDING TO TYPE OF OWNERSHIP
SAD PROVINCES
(1971)**

PROVINCES	%	%	%	NON
	TOTAL	OWNERSHIP	LEASE RENT	OWNERSHIP
				%
El Salvador	100.0	48.1	4.5	47.4
Ahuachapán	100.0	39.1	0.8	60.1
Santa Ana	100.0	34.0	2.7	63.3
Sonsonate	100.0	37.8	2.7	59.5
Chalatenango	100.0	78.8	0.3	20.9
La Libertad	100.0	32.1	5.5	62.4
San Salvador	100.0	29.1	14.7	56.2
Cuscatlán	100.0	69.5	1.6	28.9
La Paz	100.0	57.7	0.6	41.7
Cabañas	100.0	70.3	0.2	29.5
San Vicente	100.0	62.2	1.0	36.8
Usulután	100.0	49.7	1.3	49.0
San Miguel	100.0	57.3	2.0	40.7
Morazán	100.0	80.0	0.1	19.9
La Unión	100.0	71.2	0.5	28.3

SOURCE : HOUSING CENSUS 1971

ANNEX Nº 4

ECONOMIC DATA

1977 - 1981

EL SALVADOR

Data	Year 1977	1978	1979	1980	1981
GNP (Million \$)	2.866.8	3.076.9	3.447.5	3.430.6	3.424.2
GNP GROWTH RATE	5.2	4.4	(-1.2)	(-9.6)	(-9.5)
PER CAPITA GNP (\$)	689.2	718.5	781.8	755.7	732.8

SOURCE : MIPLAN

POPULATION

DATA	Year 1977	1978	1979	1980	1981
Population Density inh. per Sq.	198	204.	210	216	222
Annual Growth rate %	2.96	2.9	2.9	2.9	2.9
Labor Force (Thousands of People)	1.397.7	1.234.3	1.222.2	1.290.8	1.267.6

SOURCE : MIPLAN

ANNEX N° 5

DWELLING UNITS
 ACCORDING TO BUILDING MATERIAL
1971 CENSUS

MATERIAL	TOTAL	URBAN	RURAL
Concrete	13.9	26.4	5.0
Babareque	33.1	33.1	33.0
Adobe	25.9	27.9	24.6
Wood	9.6	6.2	12.0
Others	17.5	6.4	25.4
T O T A L	100.0	100.0	100.0

SOURCE : HOUSING CENSUS 1971

ANNEX Nº 6

IVU ANNUAL BUDGET

(\$ 000)

Año Program	1978	1979	1980	1981	1982
101	2.332.7	2.182.7	2.327.9	2.388.1	2.218.3
301	10.227.0	7.605.7	6.817.3	11.670.4	8.180.0
302	-----	-----	-----	100.0	1.720.0
501	796.6	720.6	722.4	712.3	935.4
TOTAL	13.356.3	10.509.0	9.867.6	14.870.8	15.053.7

ANNEX Nº 7

LIST OF PROYECTS 1981 - 1983
URBAN HOUSING INSTITUTE (IVU)

NAME OF THE PROJECT	CITY	Nº OF UNITS	COST (\$000)	ACTUAL STAGE
José Simón Cañas	San Salvador	1.040	7.990.0	Completed
San Bartolo	Ilopango	527	2.740.4	Completed
IVU Los 14	Santa Ana	234	3.042.0	Completed
22 de Abril	Soyapango	600	720.0	Completed
San Antonio	Mejicanos	155 (1 st) Stage	216.8	Completed
		25 (2 ^d) stage	70.0	Completed
		25 (3 ^d) stage	70.0	Completed
Santa Rosa Atlacatl	Mejicanos	133	172.8	Completed
Candelaria	San Salvador	16	204.8	Completed
Centro Urbano Lourdes	San Salvador	150	1.200.0	To be completed
C.U. José Simón Cañas	San Salvador	200	1.600.0	To be completed
C.U. José Simón Cañas	San Salvador	200	1.320.0	To be completed
C.U. José Simón Cañas	San Salvador	100	740.0	To be completed
Urbanización Llanos del Espino	Ahuachapán	246	1.755.6	To be completed
Urb. San Martín	San Martín	133	877.8	To be completed
Tugurio Nicaragua	San Salvador	250	300.0	To be completed
Campamento Técnico Indus.	San Salvador	350	336.0	To be completed
Campamento Eco. Hipotecario	San Salvador	30	112.0	To be completed
		79 [^]	112.0	
Campamento Santa Lucea	San Salvador	20	76.0	To be completed
		61 [^]	88.0	
Tugurio La Fuertez, Sonsonate	Acajutla	500	600.0	To be completed

[^]Dwelling units to be relocated

ANEX 2

NAME OF THE PROJECT	CITY	Nº OF UNITS	COST (\$000)	ACTUAL STAGE
San Marcos	San Marcos	240	1.536.0	To be completed
IVU Los 44	Santa Ana	200	1.280.0	To be completed
Reperto Guarumal	Santiago de María	100	640.0	To be completed
Tugurio Compañía	San Salvador	140	160.0	To be completed
Tugurio Renson	San Salvador	500	600.0	To be completed
Tugurio Las Palmas	San Salvador	750	900.0	To be completed
Tugurio Construcción de María	San Salvador	207	240.4	To be completed
Campamento 3 de Ilyo	San Salvador	48	115.2	To be completed
San Bartolo	Ilopango	207	530.2	To be completed
San Bartolo	Ilopango	214	556.4	To be completed

ANNEX N° 9**SETTLEMENTS UPGRADING EXPERIENCES**

NAME	YEAR OF COMPLETION	FAMILIES
La Fosa	1977	64
Tutunichapa N°1	1978	120
Tutunichapa N°2	1978	94
Comunidad 22 de Abril	1980	500
Campamento San Antonio	1981	
Centro Urbano San Bartolo	1980	297
Santa Rosa Atlacatl	1981	155

- To establish a hierarchy of service facilities for neighborhoods, districts, etc.
- Giza City is replanned for a 3.96 million people (year 2000).
- The strategic plan of urban growth in all Egypt and especially in Giza City will be in the pattern of new towns in the desert area.
- As for Giza, the urban growth will be accommodated by:
 1. New town of 6th of October.
 2. New settlement in the west on desert land remote from the agricultural land.
- We need about 30,000 units of housing per year to solve the housing problem.
- Building materials used in Egypt are a reinforced concrete skeleton and walls of bricks (burnt clay bricks are used now, but burnt silt bricks will be used later).
- The land available for new settlements must be in the desert.
- For that reason we need to finance infrastructure on these desert sites first. Loans or other aids will be considered in order to make it easier for people to come and build with their own money and labor.

III. Description of Agency and its Principal Functions

- It is the Housing Department for the Giza governorate.
- It is composed of architects, planners, and engineers.
- This Department is responsible for planning, designing and supervising construction of housing, hospitals, schools and small water supply projects. The annual budget is about 15 million Egyptian pounds per year.

IV. Analysis and Definition of the Appropriate Roles of the Public and Private Sectors

- The private sector has a very important role in solving the housing problem. The Egyptians are builders by nature. They are ready to

build for themselves or for others. We must encourage them by various means:

- By loans for low interest and very long periods.
- By planning new settlements and providing them with all infrastructure such as water supply, sewage treatment, electricity and roads and supportive facilities such as schools, hospitals, recreation centers, shopping centers, gardens, etc.
- By providing the economic base such as industry, place of work, easy transportation, etc.
- By providing models of standard designs.

The role of the public sector must be to provide:

- Infrastructure.
- Public facilities.
- Houses for low-income people and maybe for moderate income people.
- Building materials at the lowest possible price.
- Supervisors and designers.
- Standard carpentry and sanitary units.
- Factories for cement, bricks, steel, etc.

In this working paper I have tried to identify the major keys for solving the problems of housing (both formal and informal) in Giza City. I will discuss these aspects further in my country presentation and will be able to address questions at that time.

THE FOURTH ANNUAL INTERNATIONAL SHELTER
WORKSHOP FOR SENIOR PROFESSIONALS
WASHINGTON, D.C.

October 25 - November 19, 1982

HOUSING CONDITIONS IN EGYPT
AND THE GIZA GOVERNORATE

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HOUSING CONDITIONS IN EGYPT AND THE GOVERNORATE

I. Brief Background Information on Egypt

Egypt is located in the Northeast of Africa. It is composed of the valley of River Nile with its Delta, east desert, west desert and Sinai.

- The agricultural area is only the valley of the River Nile and it composes about 3% of the total land area of Egypt.

- Urbanization has occurred mainly in the valley.

- Population is about 45 million people (1982).

- Greater Cairo has about 12 million people. 16.5 million are expected by the year 2000.

- The national population growth rate is about 2.3% per year.

- The average income is about \$450 per capita per year.

- the economy of Egypt changed after 1974-75. This was due to two factors:

1. Peace after the 1973 war; and

2. Growth of external resources (Egyptian workers abroad, Suez Canal, tourism and petroleum).

II. Shelter Sector Characteristics

Giza City is an important part of Greater Cairo. It lies on the western bank of the River Nile. Its population is about 1.85 million people.

Giza is a part of greater Cairo. The main concepts of the Greater Cairo region strategy plan are:

- To divert the pressure on the existing agglomeration by construction of new self-sustained satellite towns (e.g., the 6th of October).

- To stop the urbanization of arable land by construction of physical barriers (such as a new ring road encircling the metropolis).

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HOUSING CONDITIONS IN INDIA

By: Vasant Thakar
Joyanta Chatterjee

1.0. INTRODUCTION

The urbanization trend in India indicates the rapid growth of urban settlements, especially the metropolitan centers, as compared to smaller and rural settlements. The prevailing trends and problems arising due to unprecedented growth of metropolitan areas are not only a consequence of poverty and demographic concentrations, but more a result of complex socio-economic, political and historic forces. The effects of such concentrated patterns of urbanization are not confined to the metropolitan areas, but have far-reaching implications. These geographic considerations articulate not only the settlement and population distribution patterns, but also concern national issues such as economic development, resources, conservation and social progress. As such, it is essential that an integrated view of planning and development of metropolitan areas is taken.

There is enough evidence that the Government of India is not only aware of the problem, but is also developing a broad perception of the situation. It was because of these considerations that the Delhi Development Authority prepared and enforced its first master plan for Delhi in the year 1962. Today, we are in the process of preparing a second master plan of Delhi (1982-2001). One of the major concerns of the plan is to make provisions for suitable housing for the new households as well as upgrading the conditions of the existing housing stock.

2.0. ABOUT INDIA

2.1. India is a republic, comprised of 22 states and 9 union territories, situated in the Asian continent.

2.2. Reaching from $8^{\circ}4'$ to $37^{\circ}6'$ north latitude and from $68^{\circ}7'$ to $97^{\circ}25'$ east longitude, it measures about 3200 kms. from south to north and about 3000 kms. east to west.

2.3. Population: Total - 683.8 million
 Males - 353.4 million
 Females - 330.4 million

2.3.1 Decennial Population Growth (1971-81):

Absolute - 135.6 million
 Percentage - +24.75

2.3.2. Density of Population - 221 persons per square kilometer.

2.3.3. Sex ratio - 935 females per 1,000 males.

2.3.4. Literacy Rate - Total - 36.17%
 Males - 46.74%
 Females - 24.88%

2.4. Class I Cities (100,000+ population):

Number - 216
 Population - 94.3 million

The number of cities and towns has grown from 2,641 in 1971 to 3,245 in 1981. Within town classes there is a shift towards bigger cities and towns. For example, class I cities in 1981 accounted for 60.37 percent of urban India, against 56.21 percent in the year 1971. The number of class I cities went from 141 in 1971 to 216 in 1981. The total population of class I cities in the year 1981 is recorded as 94 million as against 61 million in 1971.

2.5. Housing Stock--

	<u>1951</u>	<u>1961</u>	<u>1971</u>	<u>1981</u>
- Number of dwelling units (in millions)	64.4	79.2	93.0	107.6
- Percentage of dwellings in urban areas to total	16.6	17.8	19.9	22.1
- Number of households per dwelling	1.14	1.05	1.04	1.10
- Number of persons per dwelling	5.60	5.54	5.83	6.06

2.6. Even on a conservative basis, the housing shortage is estimated at 16.1 million in the rural sector and 4.6 million in the urban sector, making the total shortage to be 20.7 million as of 1980.

On the same basis, the shortage of housing is expected to rise to

18.0 million in the rural sector and 5.6 million in the urban sector, by the year 1985, taking into account the additions to the housing stock in both the sectors during the relevant period.

3.0 DELHI

3.1. Delhi is a union territory occupying about 365,000 acres of land. It has an ancient history dating back to the Fifteenth Century B.C., when it was known as Indraprastha of Mahabharat. Subsequently, after experiencing the rise and fall of many empires, it was the Moghuls who made Delhi their capital. Emperor Shahjahan built up the walled city of Delhi -- known as Shahjahanabad. The Red Fort and the famous Taj Mahal at Agra were also built during this period of Moghul rule. During the British rule, Calcutta was formerly the capital of India, but in the year 1911, at the time of the coronation of King George V, as Emperor of India, it was declared that the capital of India would be shifted from Calcutta to Delhi. An imperial city was ordered to be built, south of the walled city, for which over 40 square kilometers of land was acquired. The city of New Delhi was laid out on the pattern of the garden city concept. The capital of New Delhi was formally declared open in the year 1931.

4.0 DELHI DEVELOPMENT AUTHORITY

4.1. The Delhi Development (Provisional) Authority (DDA) was set up in 1955 under an ordinance, and was charged with the responsibility of "preventing bad laying out of land, haphazard erection of buildings or growth of substandard colonies and ensuring development and expansion of Delhi according to proper planning." Accordingly, with the help of the Town Planning Organization, an Interim General Plan for Greater Delhi was issued in the year 1956.

4.2. Due to unprecedented population growth, there was an increase from about 700,000 in the year 1941 to over 1,400,000 in the year 1951 which was to

escalate to 2,300,000 in 1961.

4.3. In the year 1957, an Act of Parliament called the Delhi Development Act 1957 gave the constitution of the Delhi Development Authority wide objectives and functions for the planned development of Delhi. The basic objective was "to promote and secure the development of Delhi according to plan." The executive body of the Delhi Development Authority called "Authority" as provided in section 3 of the Act consists of the Administrator (Lt. Governor) of Delhi as the chairman. It also includes two representatives of the metropolitan council, the commissioner of Municipal Corporation and three persons nominated by the Federal Government (one of whom is to have experience in town planning or architecture). In addition, there are three full-time executives, namely the Vice Chairman, Finance and Account Member, and Engineer Member. The Vice Chairman is chief executive of the authority.

5.0. ACHIEVEMENTS OF DELHI DEVELOPMENT AUTHORITY

5.1. Land acquisition and development --

76,450 acres of land has been notified, (up to the year 1980), under the Land Acquisition Act, as per the following breakdown:

- (i) 6,120 acres -- currently under section 4
- (ii) 21,500 acres -- still under section 6 (this land is primarily for recreational and green belt uses, and nearly one-third of the area is under unauthorized use).
- (iii) 3,440 acres -- acquired but not handed over due to unauthorized occupation.
- (iv) 430 acres -- under litigation.
- (v) 44,960 acres -- placed at the disposal of the Delhi Development Authority.

5.1.2. The process of notification and acquisition or actual possession is a lengthy, time-consuming process. A very disturbing offshoot of these delays is unauthorized use of land which in Delhi today is to the

extent of about 200,000 households within the urbanized limits.

5.1.3 Out of the total area of 44,960 acres placed at the disposal of the Delhi Development Authority, land has been utilized as follows:

(i)	Residential	13,900 acres
(ii)	Residential (Resettlement)	7,180 acres
(iii)	Industrial	2,700 acres
(iv)	Commercial, Institutional, and governmental	8,470 acres
(v)	Recreational	7,110 acres
(vi)	Under unauthorized use	2,290 acres
(vii)	To Be Developed now	3,310 acres
	TOTAL	<hr/> 44,960 acres

5.2. Housing

5.2.1. Due to tremendous demand for houses in Delhi, the Delhi Development Authority undertook a massive housing program. The achievement, though not commensurate with demand, has been quite substantial. An annual breakdown of houses completed and the expenditure incurred on housing is as follows:

YEAR	NO. OF HOUSES COMPLETED	EXPENDITURE INCURRED (in million rupees)
1966-67	160	3.07
1967-68	16	3.45
1968-69	1138	21.20
1969-70	3513	16.75
1970-71	778	39.78
1971-72	8599	86.80
1972-72	3583	94.98
1973-74	6598	67.86
1974-75	2398	61.87
1975-76	1257	95.81
1976-77	4478	169.23
1977-78	3154	142.44
1978-79	9236	185.71
1979-80	3428	273.49
1980-81	17,132	475.17
1981-82	20,264	1000. (approximately)

(Note US\$1.00 = 9.85 Rupees)

Presently, there are 32,812 houses under construction and 35,514 in the planning process at various stages. It is expected that during the fiscal year 1982-83, more than 25,000 houses will be completed. From 1983 onwards the objective is to complete about 40,000 houses every year for the next 5 years, so that the backlog can be cleared.

5.2.2 Out of the total houses completed by the Delhi Development Authority, 60.47 percent are for low-income groups.

5.3. Resettlement Scheme --

5.3.1. The urban poor, without affordable housing available near their places of work, squat on public or private land. This is a phenomenon occurring all over the developing world.

5.3.2. The resettlement scheme (earlier known as Jhuggi Jhopsi removal scheme) was started on the recommendation of an Advisory Committee of the Government of India, set up for the development of Delhi. This scheme may well be called, for the purposes of understanding, as the "squatter removal and resettlement scheme." The salient features of the scheme are:

- (I) Each squatter family is allowed on a license fee basis, a 21-square meter (25 sq. yds.) partially developed plot with common services.
- (ii) The family is allowed to build a dwelling unit covering the whole plot, for which a standard design is available from the Delhi Development Authority.

5.3.3. (iii) The standards of infrastructure provided under the scheme are:

(a) Services --

- (i) One water connection for 20 families;
- (ii) One W.C. (toilet) for 7 families;
- (iii) Street lighting;
- (iv) Storm Water Drainage;

(v) Roads and pathways.

(b) Facilities are the neighborhood level --

(i) Higher secondary school - 1 for 10,000 population

(ii) Primary School - 1 for 5,000 population

(iii) Nursery School - 1 for 3,000 population

(iv) Dispensary - 1 for 20,000 population

(v) Community Hall/Library - 1 for 20,000 population

(vi) Religious buildings - 5 sites for 15,000 population

(vii) Police Post - 1 for 20,000 population

(viii) Shopping Facilities - 1 shop for every 75 persons

(c) Facilities such as a college, hospital, cinema, and police station are provided at the district level at a scale of one each for about 100,000 population.

5.3.4. Up to 1972-73, the scheme proceeded at a slow pace and only 17 resettlement colonies were developed for a population of about 300,000. It was in the year 1975 that the program received a new impetus. During the following 2 years, that is from 1975 to 1977, 27 new settlement colonies were developed carving out about 150,000 plots. A total population of about 700,000 was resettled in this program.

5.3.5. Out of the total area, 53% was used for community facilities, parks, playgrounds, roads, and paths; 7 percent for commercial facilities and the balance (40%) was used for plotter development.

5.4. Regularization of Unauthorized Colonies --

5.4.1. When the first master plan of Delhi was prepared, there were 110 unauthorized colonies, which were regularized in subsequent years. However, during the plan implementation period, a large number of unauthorized colonies sprang up in different parts of the city. Presently there are 612 such unauthorized colonies on about 10,000 acres of land accommodating about 1 million people.

Accepting that it is not possible to relocate such a large number of families (about 200,000) the Delhi Development Authority has taken in hand the task of preparation of regularization plans and development of these areas, to upgrade the standard of community facilities and services. This is an attempt towards improvement of the existing housing stock available at substandard levels.

5.5. Urban Villages --

5.5.1. Due to increasing urbanizable limits, 112 villages have come under the ambit of urbanization. About 400,000 people live in these urban villages, which have lost the agricultural land around them, but have not received the advantages of urbanization, since these villages lack the basic infrastructure normally provided in urban areas. About 30 percent of the population of these villages are economically weaker and are mostly landless laborers.

5.5.2. Delhi Development Authority is providing basic amenities to these urban villages with a view to integrating them with the contiguous urban area. More than fifty percent of these villages are already the recipients of basic amenities ranging from water supply, sewerage, parks and open spaces. The Delhi Development Authority has an ambitious program for providing the infrastructure and basic amenities as follows:

(i) Water supply	- 15 million rupees
(ii) Sewerage	- 75 million rupees
(iii) Electrification	- 10 million rupees
(iv) Surface drainage and public toilets	- 15 million rupees
(v) Roads and lanes	- 65 million rupees
(vi) Community halls and other facilities	- 40 million rupees
(vii) Parks and open spaces	- 10 million rupees

5.6. Slum Clearance/Environmental Improvement Programs

5.6.1. About 3,750 acres in Delhi have been declared "slums" under the Slum Act of 1956. Part of this area, which is completely degenerated, is being redeveloped and the families shifted from these areas, are provided with alternative accommodations subsidized by the Government. So far, Delhi Development Authority has provided about 15,000 dwellings and 600 commercial plots/shops under the slum rehabilitation programs. About 4,000 dangerous buildings have been demolished in slum areas. Environmental improvement programs have reached a population of 450,000 people, so far.

6.0. As per the twenty point program of the Prime Minister of India, one of the programs is to "improve the environment of slums, implement programs of house building for economically weaker sections and take measures to arrest unwarranted increase in land prices."

7.0. HOUSING FINANCE IN INDIA

7.1. According to a United Nations study, cities of over 100,000 population will grow by 170% between 1970 and 2000, while cities with populations of over 1 million will grow by 234%. In 1960, there were 3 billion people in the world. A third of them were city dwellers. By 2000, while the world population will double, the number of city dwellers will swell threefold. It adds to nobody's knowledge to say that provision of basic needs such as food, clothing and shelter for a fast-growing population is a compelling task for developing countries with very limited resources.

7.2. The national increase in the urban population coupled with the increase in the number of migrant people seeking a job in urban areas cause a shortage of shelter in urban areas and shanty towns, squatter colonies and

slum areas develop at an alarming rate. The problems are too well-known to need any elaboration.

7.3. The need for shelter provision, however essential it might be from a socio-economic viewpoint, fails to receive priority over other equally important needs, such as, education, health, employment, etc., in the overall budget of most developing nations. Therefore, encouragement of private enterprise is necessary for development of the shelter sector. A government must facilitate growth of shelter sectors in a country. The private sector, with appropriate regulations and controls from government, can become complimentary to the government's effort in solving a country's housing needs.

8.0 INDIA'S SHELTER SECTOR

8.1. Over the three decades up to 1980, the total public sector investment in housing in India has been of the order of R. 30,530 million (US \$ 3,053 million), as compared to a private sector investment of R. 127,400 million (US \$ 12,740 million). During the Sixth Five-Year Plan (1980-85), the outlay for housing in the public sector is expected to be of the order of R. 14,910 million) and the private sector investment for housing is expected to be about R. 115,000 million). The Planning Commission of the Government of India (GOI) envisages that India needs 20 years' sustained program and investment "just to catch up with the housing requirements of the country."

8.1. GOI has not formulated any national housing policy, so far. Housing is not recognized as an industry in India and has not received the priority over other socio-economic needs. The GOI has set the following objectives:

To reduce substantially the number of absolutely shelterless people and to provide conditions for others to improve their housing environment, priorities will be for (1) provisions of house sites and assistance for the construction of

· dwellings for rural landless laborers including an element of housing assistance and/or services to assist in proper planning of lay-outs, sanitation, etc., and (2) provision of housing mainly for the economically weaker section (monthly income below R. 350 (US \$ 35) of the community. For the rest of the community, the GOI proposes to frame investment policies to promote and encourage self-housing and to augment the resources of financial institutions like Housing and Urban Development Corporation, Ltd., (HUDCO) and the State Housing Boards in order that infrastructural facilities for encouraging private sector housing is provided.

8.2. In order to achieve the above objectives, the Planning Commission has suggested specific attentions to the following:

8.2.1. Housing activity in small, medium and intermediate towns which have been neglected hitherto;

8.2.2. Low-cost housing techniques including existing local methods so as to bring down unit cost;

8.2.3. The modification of existing building by-laws, land use controls, minimum plot requirement and land requirements for roads which often make it difficult to reduce costs of shelter;

8.2.4. The avoidance of direct subsidies in urban housing. In the case of higher- and middle-income housing, subsidies should be totally avoided. For low-income housing, where some direct subsidies are inevitable, they should be preferably in the form of infrastructural and sanitation facilities which improve the environment for people to invest in their own shelter;

8.2.5. Greater stimulus and support to private housing in the middle- and lower-income groups so that there are incentives to channelize savings into housing construction.

8.2.6. The planning commission envisages a promotional role of the public sector for provision of housing in urban areas. It will be confined

to provision of housing for the urban poor, improvement of slums and encouragement of agencies like HUDCO who can marshal private resources in a constructive manner.

8.3. In order to achieve the goals set out above and to promote housing activities in the most effective manner, establishment of a housing finance system is most essential. Even though housing is predominantly a private sector activity, constituting about 85% of the total investment in the housing sector, GOI has yet to formulate a comprehensive housing finance policy and make its role more perceptive and effective in the housing sector.

8.4. At present the institutional agencies involved in housing finance are:

- (i) Life Insurance Corporation of India
- (ii) General Insurance Corporation of India
- (iii) Housing and Urban Development Corporation, Ltd.
- (iv) Nationalized Banks
- (v) Scheduled Commercial Banks
- (vi) The State Provincial Cooperative Housing Finance Federations (known as Apex Housing Societies)
- (vii) State Government: Housing Directorates
- (viii) State Housing Banks

8.4.1. Life Insurance Corporation of India (LIC), a public financial institution, is the single-largest institutional investor for housing in India. As of March 1981, it constituted Rs. 11,410 million (US \$ 1,141 million) to housing development in addition to Rs. 20,130 million (US \$ 2,013 million) towards infrastructural development through various State Governments and agencies. LIC lends through the State Governments. State Housing Finance Federation lends directly to their policy holders and employees under a mortgage

finance scheme. It directly provides funds to individuals on a limited basis for high-cost housing. Its direct lending for housing to individuals has been negligible.

8.4.2. General Insurance Corporation of India (GIC), another public financial institution, supports HUDCO for development of the shelter sector.

8.4.3. Housing and Urban Development Corporation, Ltd., (HUDCO) is the public sector agency which undertakes housing and urban development, finances establishment of building materials industries in the country. HUDCO does not provide housing finance to individuals. It finances State Housing Boards, Slum Clearance Boards, Rural Housing Boards, Regional Development Authorities, City Improvement Trusts, Municipal Corporations, the Public Sector Companies, Private Sector Companies (in a very limited manner), State Apex Housing and Finance Societies and Primary Housing Societies. HUDCO has defined different income groups as follows:

<u>Category</u>	<u>Income Range * Monthly Income</u>	<u>Definitions</u>
I	Less than Rs. 351	Economically weaker (Section (EWS))
II	Rs. 351 to Rs. 600	Low-Income Group (LIG)
III	Rs. 601 to Rs. 1500	Middle-Income Group (MIG)
IV	Rs. 1501 and above	High-Income Group (HIG)

*Total household income taken to include the income of husband, wife, dependent relations, including unmarried children.

8.4.4. HUDCO's primary target group, in conformance with the declared objectives of GOI, has been those people belonging to the economically weaker sector (EWS) and the low-income (LIG). HUDCO has sanctioned as of March 1981 more than Rs. 7,060 million (US \$ 7,060 million) for various housing and urban development projects benefitting about 5.3 million people in 346 towns

and cities spread across the country.

8.4.5. Nationalized Banks and Commercial Banks: the role of the banking sector in providing housing finance has been negligible. Besides lending to their own employees, their direct involvement in housing finance is of the order of Rs. 1,000 million (US \$ 100 million). Reserve Bank of India (the country's central bank) appointed a working group on the whole of the banking system -- finance for housing schemes. The report, known as "R.C. Shah Report," recommended an annual investment of Rs. 750 million (US \$ 75 million) on housing excluding its subscriptions to capital issues of HUDCO and lending to bank employees. The GOI has accepted the recommendations, but the banks have yet to respond to the directions. It has lent about Rs. 50 million (US \$ 5 million) to HOFC as recommended by GOI.

8.4.6. The State Cooperative Housing Federation (APEX Housing Finance Societies): the Apex Housing Societies provide housing finance to the primary cooperative housing societies. It works under the State Government and most of the states have an apex society. The following table shows this position:

Apex Housing Finance Societies (positions as of March 1978)

1.	Number of Apex Housing Societies	-	19
2.	Total Working Capital	-	Rs. 2,777 million
3.	Loans	-	Rs. 2,224 million
4.	Outstanding Loans	-	Rs. 2,402-3 million
5.	Number of Member Societies	-	Rs. 12,396

8.4.6.1 Apex Housing Societies borrow funds from LIC and the deed capital is provided by the respective State Governments. They lend money at an interest rate of 12.5% up to 80% of the cost subject to a maximum loan of Rs. 50,000 (which is being revised to Rs. 30,000).

They do not finance housing units costing more than Rs. 120,000. The finances available from the Apex Societies are mostly availed of by the MIG, HIG and in a limited way, by the LIG.

8.4.7. Provident Fund Organization (PF)

PF schemes cover wage and salary earners both in the public and private sectors. Collections occur either under the statute or on a voluntary basis. The collections rose to Rs. 8,108.5 million. As in other countries, the PF collections comprise contributions by the employers and employees, the rate of contribution varying from 8% to 10%. The collections are required to be invested as per policies framed by GOI. The funds are essentially invested in government securities, banks, postal savings and time deposit accounts. Housing advances to members of PF schemes did not go beyond 1% of total advances of Rs. 28.9 million as of March 1976.

8.4.8. Central and State Government Social Housing Schemes

The Central and State Governments undertake construction of quarters for their employees. Government employees are also eligible for long-term housing loans, depending upon their income, for acquisition of dwelling units, at a relatively lower rate of interest. All the State Governments have introduced subsidized housing schemes for industrial workers and the economically weaker sectors. There are housing schemes for low- and middle-income housing. Some state governments have rental housing schemes for their employees and also members of the public from LIG and MIG. Various other schemes provide for rural housing, plantation labor housing and slum clearance. But, the schemes, with their honest purposes, have been hardly effective due to a scarcity of funds.

8.4.9. The State Housing Boards:

The State Housing Boards undertake construction of dwelling units and development of housing sites and

allot them to individuals and primary cooperative housing societies. They formulate their schemes in a manner which enables them to cross-subsidize the housing units and sites for LIG and MIG. The State Housing Boards receive support from HUDCO.

8.5. Following the examples of State Housing Boards and Housing Directorates, a few regional development authorities have also undertaken construction of housing units and sites for EWS, LIG or MIG, even though their primary functions are formulation of plans for urban development.

8.6. The government made a welcome beginning but measures to increase the public and private investment in housing through development of an appropriate housing finance structure were not taken.

8.6. Private sector investment in housing constitutes about 85% of the total outlay but it lacks the support of a financial system. Developers need financial assistance for promotion of housing projects. Individuals constructing or acquiring a dwelling unit need long-term funds. Individuals, except those in the public sector, have practically no access to housing finance such that they can bridge the gap between their need and available resources. It was felt that the country needs financial institutions which can give an individual easy access to housing finance and provide long-term funds for home ownership. It was this objective that the Industrial Credit and Investment Corporation of India, Ltd., (a financial institution in the public sector), together with the International Finance Corporation (IFC) and His Highness Aga Khan, promoted the Housing Development Finance Corporation, Ltd., (HDFC). HDGC, incorporated in 1977 with an authorized capital of Rs. 250 million and a paid-up capital of Rs. 100 million. 30% are held by public financial institutions and nationalized and scheduled banks, 5% by IFEW, 5% by His Highness Aga Khan and the balance, by private sector corporations, and individuals. It is a widely-held company.

8.7. HDFC provides long-term loans to individuals, cooperative housing societies, groups of individuals and corporate bodies. An individual may obtain a loan up to 70% of cost at rates of interest varying between 12.5% and 14.5% repayable in a maximum period of 15 years. HDFC has provided an institutional facility for raising loans for housing up to a limit of one's repayment capacity. Its loan schemes encourage people to plan for housing within their affordable limits.

8.8. HDFC raises resources from its attractive savings plans offered to depositors and future homeowners. It has received a line of credit from IFCW, Life Insurance Corporation and from the banking system in India. HDFC has negotiated a guarantee of US \$ 30 million from USAID and signed an implementation agreement of US \$ 20 million to be raised by HDFC in U.S. capital markets.

8.9. HDFC has received active support from the GOI and Reserve Bank of India, enabling it to mobilize deposits from individuals, corporate bodies and institutions. Operational highlights (given below) show steady progress of HDFC since it started operating in 1978.

	HDFC OPERATIONAL HIGHLIGHTS			
	<u>in Millions Rs.</u>			
	<u>1981-82</u>	<u>1980-81</u>	<u>1979-80</u>	<u>1978-79</u>
Term Loan Approvals	440.1	314.4	227.5	70.8
Total Loan Disbursements	297.9	209.9	90.6	13.1
Total No. of Units	11,761.0	9,185.0	7,255.0	6,665.0
Average Loan Per Unit	*30,000.0	26,000.0	21,000.0	11,000.0
Funds Employed	69,005.0	423.6	155.6	101.7

8.10. Establishment of HDFC was a turning point in private sector housing finance in India. Its contribution to diversion of household savings to housing, though humble, has made a breakthrough. The success of a housing finance institution depends on its abilities to raise deposits from household sector savings. A prospective home owner saves over a period of time to be eligible for a loan. In the UK, the building societies, which provide 80% of the housing finance in the country, received 36% of the household sector savings. This compares to 27% saved with the banks in West Germany and 24% received by the savings and loan associations in the U.S.A.

8.11. The Planning Commission has appointed a working group with a view to formulating a proper strategy for urban development and housing. Even with the limited resources of a government in a developing country, positive progress in solving the shelter program can be made if the public policy succeeds in creating a condition which nurtures a steady growth of funds available for housing -- a condition in which the public is encouraged to save for housing is necessary. A condition which minimizes the hindrances to acquisition of a dwelling unit is important. A condition is essential in which a financial structure is provided to reduce to the lowest extent possible the cost of funds needed by private entrepreneurs related to housing activities and by the prospective owners of dwelling units.

8.12. Legislation such as The Urban Land (Ceiling Regulation) Act 1976 has done more damage than any good to the poor. Though the intention of the legislation was to prevent speculation on urban land and make large parcels available for development of housing for the urban poor, the Act has proven ineffective and counterproductive. It has reduced availability of land and the prices of land have skyrocketed.

8.13. The declared objectives in the housing sector advanced in the Sixth Five-Year Plan and the Government's intention to formulate a Housing and Urban Policy is a welcome development.

8.14. HDFC is working in cooperation with the Government at the central and state levels. HDFC's successful work and the manner in which HDFC is trying to facilitate home ownership is an example readily available to the government to realize the importance of mobilizing private initiative in fulfillment of social needs.

REFERENCES

1. Planning Commission, Government of India: Sixth Five-Year Plan (1980-85).
2. Government of India, National Buildings Organization: UN Regional Housing Center for ESCAP -- Handbook of Housing Statistics, 1980.
3. National Buildings Organization: UN Regional Housing Center for ESCAP: Prominent Facts on Housing in India.
4. J.N. Mangia: Housing: Necessity Turned into a Luxury, published in Commerce, December 19, 1981.
5. Government of India: Census of India 1981.

A PROFILE ON

HOUSING DEVELOPMENT FINANCE CORPORATION LIMITED (HDFC)

OCTOBER 1982

Organisation

Housing Development Finance Corporation is a public limited company in the private sector which specialises in the provision of housing finance to individuals, cooperative societies and the corporate sector. It has an issued and paid-up share capital of ₹ 10 crores held by 14,000 shareholders, mainly financial institutions, banks, private and public sector companies and individuals. HDFC was promoted in October 1977 by the Industrial Credit and Investment Corporation of India, International Finance Corporation, Washington and The Aga Khan.

HDFC is a professionally managed organisation with a Board of Directors consisting of eminent persons representing various professions including finance, insurance, engineering and construction.

The primary objective of HDFC is to enhance the residential housing stock in the country through the provision of housing finance on a systematic and professional basis and to promote home ownership.

HDFC has seven branch office at Ahmedabad, Bangalore, Calcutta, Cochin, *Madras, New Delhi and Pune besides the Head Office in Bombay and a branch office in Dadar, Bombay.

* Hyderabad

Funding

HDFC funds its operations through long term loans and through its deposit schemes. HDFC has raised loans from the LIC and from the commercial banks. At present, HDFC has two deposit schemes in operation : The Certificate of Deposit (CD) Scheme and the Loan Linked Deposit (LLD) Scheme. The CD Scheme attracts deposits at competitive interest rates over the short and medium term (6 months to 60 months) and is especially suited for companies, institutions and trusts that have surplus funds. The LLD Scheme helps future home earners save regularly for a period of years before becoming eligible for housing loans of upto four times their accumulated savings subject to their repayment capacity.

Tax Benefits

Interest earned on deposits with HDFC qualify for deduction upto Rs 4,000/- under Section 80L of the Income Tax Act. Further, deposits qualify for exemption of upto Rs 1.65 lacs under Section 5 of the Wealth Tax Act.

Loan Schemes

(i) Individuals

Eighty percent of HDFC's total loan approvals are for individual home ownership. Individuals can obtain loans for the purchase, construction or extension of a housing unit anywhere in India. HDFC considers loans to all income groups and its primary criterion of eligibility is the borrower's capacity to repay the loan on a monthly basis in equated monthly instalments over a period of 5 to 15 years. The quantum of loan is determined according to the repayment capacity of the borrower subject to a maximum loan of seventy percent of the value of the property to be financed. The rate of interest varies from 12.5% to 14.5% per annum depending on the quantum of the loan. The security for the loan is an equitable mortgage of the property to be financed.

(ii) Cooperative Societies

Cooperative societies are evaluated on the basis of each individual applicant on the same terms as (i) above.

(iii) Corporate Sector

HDFC lends to corporate bodies for the construction or purchase of new residential housing anywhere in India for the use of their employees. HDFC also offers various

facilities by which individual employees may obtain loans from HDFC through the company. These schemes are outlined below.

I Staff Housing by the Company

In this case HDFC can lend to the company for a housing project to be undertaken by the Company itself for the use of employees. The rate of interest is 15% per annum. A higher rate is charged depending on the extent of HDFC's financing, period of repayment and other factors. The period of repayment is ordinarily 5 years.

II Line of Credit Schemes

- (a) HDFC can lend to a company against acceptable security for on-lending to individual employees for housing.

The rate of interest is 15% per annum and the maximum period of the loan is 10 (ten) years.

- (b) HDFC can lend directly to individual employees nominated by the company with the company guaranteeing the loans.

The rate of interest in this case is 14.5% per annum with a maximum period of fifteen years.

Beneficiaries under the Corporate Loan Schemes are normally those in the middle to low income groups.

Over the years, HDFC has demonstrated the need, the possibility and the importance of housing finance in India. People from all walks of life have responded to the facilities offered by HDFC and have gone ahead to purchase or build homes of their own. In 1979-80, the first year of operations, HDFC approved loans of Rs 7.08 crores and disbursed Rs 1.31 crores for a total of 6,665 units.

Cumulative loan approvals and disbursements as at June 1982 have risen to Rs 105 crores, and Rs 61 crores respectively for over 35,000 units.

HDFC DEVELOPERS LIMITED

In order to fulfil its developmental role, HDFC promoted a wholly owned subsidiary company, HDFC Developers Limited, to undertake housing project on a selected basis in various regions of the country. HDFC Developers' first housing project of 476 units is at Pimpri-Chinchwad, a suburb of Pune which is progressing. A residential and office complex in Vashi, New Bombay has also commenced.

The task of the next five years is to develop further the small beginnings that have been made. At the current rate of growth, HDFC expects to approve loans of Rs 100 crores annually. At the same time, by increasing the flow of funds for housing, HDFC hopes to increase access to housing finance for all groups of people, especially those wage and salary earners in the low and middle income groups.

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APPENDIX

I HDFC's Experience in Private Capital Mobilisation:

HDFC's main concern in its initial years has been to mobilise funds for housing finance in an environment in which this is not a familiar activity. Funds have to be coaxed into the housing sector mainly through financial institutions and through the corporate sector.

- 1 The financial institutions : by stressing the importance of resources for housing and by demonstrating its capacity to channel these resources to middle income people who are mainly salary and wage earners, HDFC has been able to raise long term loans and deposits from public financial institutions such as the LIC and the commercial banks. Substantial funds have also been mobilised from the co-operative credit banks and other local financial institutions.

- 2 The co-operative sector : The co-operative credit sector is mainly organised at the local level through a structure of co-operative banks. While these banks accept deposits from the general public, their lending is confined to the co-operative sector only. Housing is also mainly organised as co-operative societies in certain states in the country especially the state of Maharashtra. As HDFC finance is mainly received by individuals who purchase flats and

and apartments in buildings organised as housing co-operatives. HDFC is heavily committed to the co-operative sector. In recognition of this, the Maharashtra Government has permitted the co-operative banks to invest their surplus funds with HDFC and this had become an important source of finance.

- 3 The Corporate Sector : The housing stock can be increased substantially if the Corporate Sector, both public and private, were to assume some responsibility for the provision of housing for their staff and workers. As companies have not had access to finance for housing they have been reluctant to provide anything beyond the minimum housing needs of their staff. HDFC, by providing the corporate sector with facilities through which they can either build or allocate houses to their staff and workers has encouraged a greater house building effort. Substantial funds have also been mobilised from the corporate sector linked to the finance of their housing projects. HDFC finance is available to the company itself for its own housing projects or to finance employees through the company so that separate units can be purchased by employees themselves. In this way, HDFC ensures that finance is mainly received by individuals mainly in the lower and middle income range for their housing needs.

A large number of companies have constituted staff welfare trusts through which staff welfare activities are financed. HDFC, has been able to mobilise substantial funds from these trusts linked to staff housing loans through the corporate sector. Arrangements of this type benefit mainly lower income people as the welfare fund are in a position to provide a certain extent of subsidy to those lower income staff members who avail of housing finance.

The potential of housing development through the corporate sector is enormous; beneficiaries are mainly of the lower income group, considerable housing is undertaken if long term loan funds are available, lower income people benefit from subsidies, funds are also raised from the corporate sector for housing investment. The multiplier effect of these benefits is considerable, especially for industrial relations.

- 4 HDFC has also approached various public service agencies to determine whether there are possibilities to raise resources from them linked to the provision of housing finance for their employees. One such arrangement that has been formulated is with the Army Welfare Housing Organisation (AWHO).

AWHO deposits funds with HDFC and HDFC in return provides housing loans of a multiple of these deposits to all categories of defence personnel. HDFC, in effect, is able to provide a service facility through which housing loans can be processed.

- 5 Charitable Trusts : In India, charitable trusts have substantial investible funds at their disposal. They are, however, required to invest in well defined 'trustee securities'. Trustee security status, as well as certain tax provisions, granted to bonds or deposit certificates of recognised housing finance institutions could draw substantial funds for housing investment. HDFC has received trustee security status but has yet to receive the benefit of certain tax provisions which will permit trusts to invest with HDFC.

- 6 International sources: HDFC has been actively involved with various international organisations from which it has received substantial help and guidance. The International Finance Corporation, Washington, an affiliate of the World Bank - a promoter of HDFC - provided a line of credit of US \$ 4 million in its initial years to help HDFC raise resources from domestic sources. Recently HDFC has also negotiated a guarantee from USAID for US \$ 30 million and has signed an implementation agreement for US \$ 20 million to be raised in US capital markets. International sources of funds help HDFC to raise domestic resources as it demonstrates the importance that other agencies place on the need for greater efforts to raise resources for housing.

II Some significant recognitions received by HDFC

- (i) HDFC was recognised as an all India term lending institution by the Government of India. This recognition allowed HDFC to create a special reserve to the extent of 40% of pre tax profit before the deduction of tax.
- (ii) All deposits placed with HDFC qualify for tax exemption upto a specified limit. This, in effect, places HDFC on par with commercial banks.
- (iii) The Reserve Bank of India classified HDFC as a Non banking Financial Company and, specifically, as a Housing Finance Company. This enables HDFC to accept deposits for a period varying from 6 months to 60 months without the imposition of a ceiling on the quantum of deposits.
- (iv) Any bonds issued by HDFC have been granted Trustee Security Status under the Indian Trusts Act.
- (v) The Maharashtra and Gujarat State Governments have granted permission to Co-operative banks to invest surplus funds with HDFC.

Indonesian Presentation:

MASS HOUSING DEVELOPMENT
IN INDONESIA

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MASS HOUSING DEVELOPMENT IN INDONESIA

I. BACKGROUND

Indonesia is an archipelago country consisting of thousands of islands which is located between the Asian and Australian Continents, extending from 6° North Latitude to 11° South Latitude and from 95° to 141° East Latitude. The greatest distance from North to South is 1888 kilometers and the greatest distance from West to East is 5100 kilometers. But only around 3000 of total of 35,000 islands are occupied with differential densities as shown below in the table.

Table 1. Population Distribution and Growth Rate.

No.	Island	Population		Area		Density per sq km	Growth Rate
		Per Island sq km	Percentage	Per Island sq km	Percentage		
1.	SUMATERA	28,016,160	19.00	473,606	24.67	59	3.32
2.	JAVA	91,269,528	61.88	132,187	6.89	690	2.02
3.	NUSA TENGGARA	8,487,110	5.76	88,488	4.61	90	2.01
4.	KALIMANTAN	6,723,086	4.56	539,460	28.11	12	2.96
5.	SULAWESI	10,409,533	7.05	189,216	9.85	55	2.22
6.	MALUKU & IRIAN JAYA	2,584,881	1.75	496,486	25.87	5	2.79
	INDONESIA	147,490,298	100	1,919,443	100	77	2.32

This table shows that a majority of people still live in Java (61.89%) which is only 6.89% of the total area, Indonesia Archipelago. Indonesia, up to now, has the fifth largest population in the world, after the Republic of China, India, USSR and USA. It is estimated that in the year 2000 with such a rapid growth rate, 2.32% average growth,

the total population in Indonesia will reach 230 million or almost twofold of the present number. The government and the community are very much concerned with the fast population growth and its unequal distribution. Although approximately only 20% of the total population lives in the urban area, it stimulates some crucial problems as shown in this table for the five cities with more than one million population.

Table 2. The five big cities in Indonesia.

No.	City	Area sq km.	Total Population	Density per sq km.	Growth Rate
1.	JAKARTA	587.62	6,053,449	11,067	3.93
2.	SURABAYA	274.06	2,027,913	7,399	2.95
3.	BANDUNG	81.25	1,462,637	18,002	2.20
4.	MEDAN	264.00	1,378,955	5,027	8.88
5.	SEMARANG	99.90	1,026,671	10,329	5.21

Data based on 1980 Census

To solve the fast population growth and its unequal distribution, the government during the Pelita II (the second Five Year Development Plan 1974 - 1979) had taken the following steps:

- Intensification of family planning program
- Transmigration and all sectors development
- Reduction of Urbanization
- Resettlement Programs

II. HOUSING PROBLEMS IN INDONESIA

Settlement Pattern

The ever increasing migration from rural to urban areas has aggravated housing conditions in many big cities of Indonesia. Particularly in Jakarta (the capital city), Surabaya, Bandung, Medan and Semarang, urbanization has resulted in unbalanced population concentrations, which in turn induces illegal use of land for housing. In many of Indonesia's big cities, slum areas appear to be accommodating motley groups of people. These "housing" areas are often deprived of even the very basic amenities necessary to lead a decent human life: drainage system is usually very poor if existent, clean water supply is an unheard of luxury and most of the houses are built from very inferior quality building materials.

Prior to the beginning of the Pelita II (the Second Five Year Development Plan), government contribution to the housing sector was rather small. In the 1950s and 1980s there was some construction by government agencies to house their employees. Emphasis was placed upon the development and construction of low-cost housing prototypes and some technical assistance particularly for self-help housing in rural areas. As a result, approximately 1,200 low-cost housing units were constructed in nine cities.

The Kampung Improvement Program (KIP) was instituted in 1969 to upgrade the existing residential areas of the city through providing municipal facilities, such as drainage canals, the improvement and widening of vehicular roads and footpaths, the establishment of community wells, public toilets, washing and bathing facilities, garbage bins, health clinics and primary schools. This program has received extensive World Bank assistance since FY 1973/1974, but KIP itself did not build or pro-

vide loans for housing construction. In the early 1970s, private developers, called "real estate firms", were growing like mushrooms during the rainy season. Encouragement by the government was given in the form of attractive investment facilities, and the developers were required to build high-income houses, middle-income houses and low-income houses in the ratio of 1:3:5, respectively. But in practice, only high-income people were able to own the houses since they had to pay in cash. So it was quite logical that most of the developers preferred not to build the low-income housing.

Housing Demand & Housing Supply

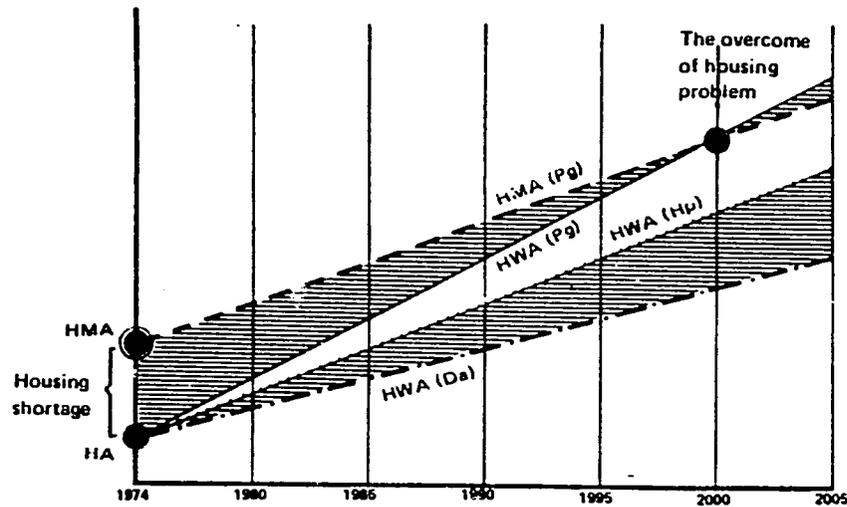
The estimation of the demand or need for housing includes the following three components: (a) growth of population, (b) replacement of inadequate dwelling units and (c) reduction of overcrowding. The programs for housing construction for Pelita II and III, and most probably also for Pelita IV, are created to enhance mass housing construction in general. Attention was given most to overcoming the need for housing due to the growth of population.

The need due to population increase is a straight forward calculation derived from assumptions about the growth rate of urban population and average household size which yield new household formation, and this is equal to the number of houses required. The total need for housing in Indonesia was estimated at about 210,000 units per year as shown in Figure-1 (120,000 units in rural areas and 90,000 units in urban areas).

Based on the data of the 1980 census, the housing stock is 29,318,790 units, the majority of which are in Java.

Figure-1.

THE HOUSING DEMAND AND POPULATION GROWTH PROBLEM



12 houses/1000 persons
graphic line of an ideal housing programme
(1.500.000 houses a year)

4 houses/1000 persons
graphic line of the trend of PELITA II
(440.000 houses a year)

4 houses/1000 persons
graphic line of the trend of PELITA II
(440.000 houses a year)

2 houses/1000 persons
graphic line of no PELITA II sponsorship
(230.000 houses a year)

The demand of additional housing 210.000/year
- urban 90.000/year
- rural 120.000/year

- HMA : Housing must be available
- HA : Housing available
- HMA (Pg) : Housing must be available in relation to the population growth
- HWA (Pg) : Housing will be available in relation to the housing programme to overcome the population growth
- HWA (Hp) : Housing will be available in consistence with the housing programme
- . - . HWA (Da) : Housing will be available concerning to the developing ability of the community

Regional variation in the distribution of the housing stock and the number of families are shown on Table 3.

Table 3.

No.	Island	Total of *) Housing	Total of **)
1.	Sumatera	5,117,737	5,365,342
2.	Java	19,061,239	19,587,426
3.	Nusa Tenggara	1,680,548	1,573,129
4.	Kalimantan	1,225,822	1,317,739
5.	Sulawesi	1,822,039	1,919,382
6.	Maluku & Irian Jaya	411,405	441,341
	Indonesia	29,318,790	30,204,354

Note: *) not include mix-used housing.
 **) not include special group (dormitory, jail or others).

Indonesia identifies the problem of urban housing (in towns and cities) differently from the problem of housing in rural areas; it has to cope with both the great shortage of houses as well as with the great amount of people from the low income group who really need a house (thus a quantitative matter); in rural areas the essential problem is how to improve the physical quality of the houses and how to achieve present day's standard of privacy, health (personal and environmental), and comfort.

In the urban area, wherein the price of land is high, rational housing design must be applied. In Indonesia, rational design must also mean avoiding wastage of material, money, time and labor which may still occur in conventional

methods of building.

Formally, norms, codes, and regulations relating to building already exist, but many of these must still be revised or updated. In the mean time, a number of proposals and recommendations which are not yet formalized as standards have already been widely applied. Building materials in Indonesia are shown below in Table 4.

Table 4.

	M a t e r i a l	
	Classification of Government Housing	
Foundation	Stone	- light concrete - lime stone
Wall	Brick	- concrete blocks - concrete slab - pozzolan block
Structure	Reinforced concrete	- steel or other metal - wood
Floor	PC tiles	- terazzo tiles - light concrete
Ceiling	- asbestos cement - triplex	- plywood - acoustic tile
Truss	Wood	- steel or iron - reinforced concrete
Proof	Brick tile	- asbestos cement - aluminium or zinc corrugated

The government plans to finance annually the construction of about 30% of the actual total need. Participation of private sectors is thus encouraged. The government also allocates financial aid for the improvement of rural housing with a target of around 120,000 housing units per year. Considering the above-mentioned figures, particularly regarding the urban housing, it seems that the time has come to recommend industrialization which is, however, not that simple. As regards to the improvement of rural housing, partial standardization (total is not possible) seems to be justified.

Rather different from the case of urban housing, the building process for the construction of rural housing is based on "aided self-help" in which the government gives technical assistance in the form of tools, equipment, and building materials which are not available in the village; or even money to stimulate the activity. Introducing new methods of construction, including the material to be used, is demonstrated by erecting full scale "model houses" and by training local people on site. It is observed that broadening the knowledge in building techniques stimulates the increase of more skilled people in the villages and has even awakened small entrepreneurs to establish cottage industries to produce building materials.

However, their quality and dimensions are not yet standardized. Certain building materials are ready for immediate use in the form as they are found. They are from mineral or vegetable origin and need only to undergo a simple process that does not change their original physical properties, for example:

- Natural stone for foundation or floor
- Unburned mud / soil / clay blocks for wall
- Thatch for roof covering
- Bamboo and timber for walls, floor and other structures.

These types of housing are used in the rural or the remote area.

Land Availability and Tenure

Land prices of developable land in urban areas, such as in Jakarta and Surabaya, have risen dramatically in the past few years and this trend shows no sign of abating. Land within existing city limits is also very costly, but peripheral land can often be purchased ahead of use at much lower costs. In evaluating peripheral sites, special emphasis should be placed on analysing the trade-offs between land and transportation costs.

On the other hand, land particularly in Java, is the major source and viable avenue for speculation by investors in Indonesia; it is fair to assume that this has resulted in higher prices for land. Research of time series data for land suitable for development by location should be undertaken as soon as possible.

Preliminary discussion and research indicate that land prices in Jakarta have increased at a much greater rate than income, particularly for low-income groups. The high prices, combined with high transaction costs, make land assembly for low-income projects difficult for Perum Perumnas.

Unlike other urban development agencies particularly those in western countries, Perum Perumnas has no eminent domain powers and is unable to expropriate land for the public good. The result is that substantial costs and time are spent in acquiring suitable land for Perum Perumnas projects. Production delays occur between site selection and feasibility design due to the uncertainty of the eventual configuration of land parcels. Hold outs and enclaves are not uncommon, necessitating further lengthy negotiations, and in some instances preferred sites are rejected by Perum Perumnas due to lack of willingness to sell by land owners. The process is further complicated by the fact that land ownership in Indonesia is generally severely disaggregated, resulting in negotiations with many owners. Collusion between sellers on both price and negotiating strategy is also enhanced by this existing process.

III. HOUSING INSTITUTIONS AND THEIR PRINCIPAL FUNCTIONS

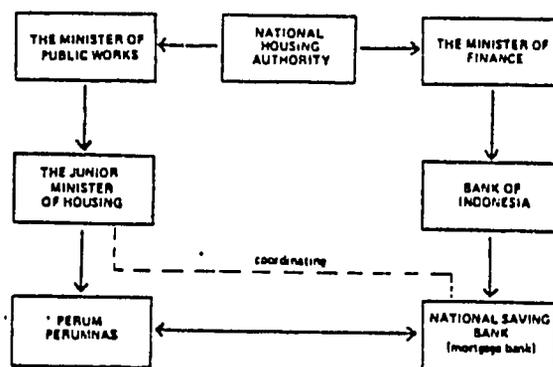
Starting from the beginning of Pelita II, efforts to provide a systematic approach to the problems of the housing and urban sectors in general were initiated. In the field of housing, a number of new institutions were created or existing institutions changed to perform new functions. In addition, a set of general goals were set with regard to housing production.

Five institutions were established for the related areas of housing policy, housing production, and housing finance.

1. National Housing Authority (BKPN) was established by Presidential Decree no. 35 (July 1974) to set overall national housing policy and to coordinate the activities of Ministries with a role in housing matters. This body is chaired by the Minister of Public Works and reports directly to the President. The Executive Secretary of the BKPN is the Director General of Housing, Planning, Building and Urban Development (Cipta Karya) within the Ministry of Public Works.
2. National Urban Development Corporation (Perum Perumnas) was established by Presidential Decree no. 29 in June 1974 to undertake the acquisition and development of urban land and the construction of low-cost housing and sites and services projects throughout the country. However, Perumnas as a government corporation (Perum) has its general policies set by the Minister of Public Works and BKPN. Its specific policies are set by its own Board of Directors, appointed by the President on the recommendation of the Minister of Public Works.
3. National Mortgage Bank. In 1975 the State Savings Banks (Bank Tabungan Negara or BTN) was restructured and made responsible for housing mortgage financing. Prior to that, Indonesia had no real mortgage financing system except for very short-term loans.

4. Office of the Junior Minister of Peoples Housing. In 1977 the President appointed a Junior Minister of Peoples Housing to coordinate more closely all activities related to the housing sector which will be implemented by several institutions. The Junior Minister reports directly to the President but also at the same time coordinates with the Minister of Public Works especially on matters related to Perumnas.
5. Housing Mortgage Corporation (P.T. Papan Sejahtera) was established in 1980 to provide mortgage financing for higher income groups with higher interest rates up to 18% per annum. This new semi-private mortgage financing institution is operated and financially supported by several local as well as international financing institutions.

The inter-relationship among housing institutions, and also members of the National Housing Authority (BKPN), is presented in Figure - 2.



**MEMBERS OF
THE NATIONAL HOUSING AUTHORITY**

(Badan Kebijakan Perumahan Nasional)

1. Minister of Public Works (Chairman/member)
2. Minister of Social Affairs (Vice Chairman/member)
3. Minister of Home Affairs (member)
4. Minister of Finance (member)
5. Minister of State for Administration Reform Vice Chairman of National Development Planning (member)
6. Minister of Industry (member)
7. Minister of Manpower & Transmigration (member)
8. Minister of Health (member)
9. Governor of Central Bank (member)
10. Director General of Housing, Building, Planning and Urban Development (Executive Secretary member)

PERUM PERUMNAS

Perum Perumnas (The National Urban Development Corporation) is a non-profit Government enterprise. As mentioned above, general policies are set by the Minister of Public Works and BKPN but its specific policies are set by its own Board of Directors, appointed by the President on the recommendations of the Minister of Public Works. The structural organization is shown on Figure - 3.

Perum Perumnas has seven branch offices and eleven project offices, which report and are responsible directly to the Board of Directors. Divisions assist the staff of the Board of Directors in preparing and processing procedures for all steps and policies of the Board of Directors. Principally, the Branch offices handle Estate Management over the long term and the Project Offices handle project construction on site in the short term. The period over which a Project Office functions depends on the construction schedule and the project locations.

PROGRAMS

The programs for housing construction for Pelita II and III, and most probably also for Pelita IV, are geared to enhance housing construction in general through mass housing construction initiated by Perum Perumnas. Attention was given to overcoming the need for housing due to the growth of population. Perum Perumnas' target was set at 73,000 units for Pelita II and 120,000 units for Pelita III, with a further assumption that the biggest portion of the housing need can be fulfilled by the people's own effort; some will be supplied by private developers.

Table 5 and Figure 4 show the progress and projections of five sub-programs based on an August 1982 report. The first four years of Perum Perumnas' existence have also identified constraints under which Perum Perumnas must operate. Some of its difficulties can be explained as the normal start-up

The Organization

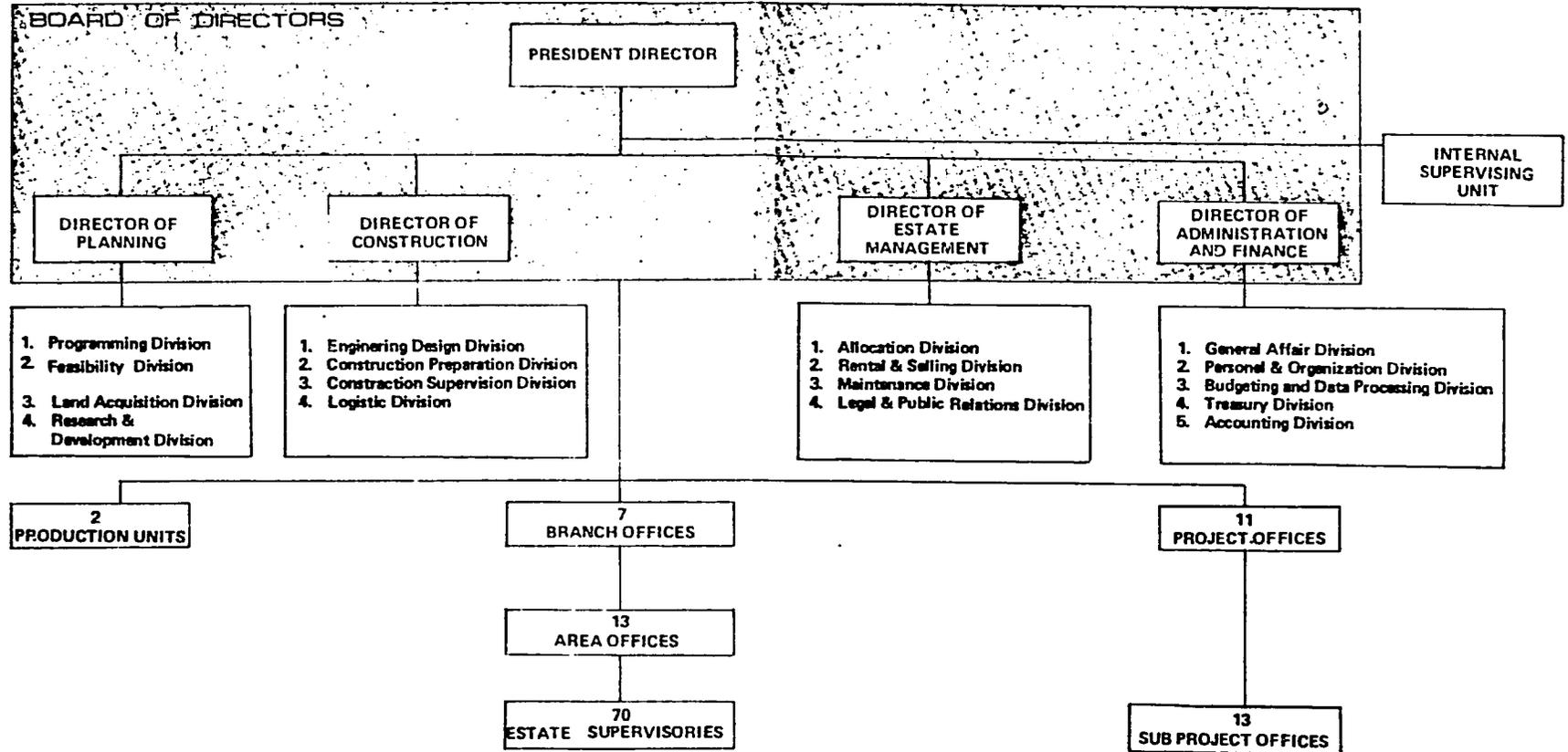


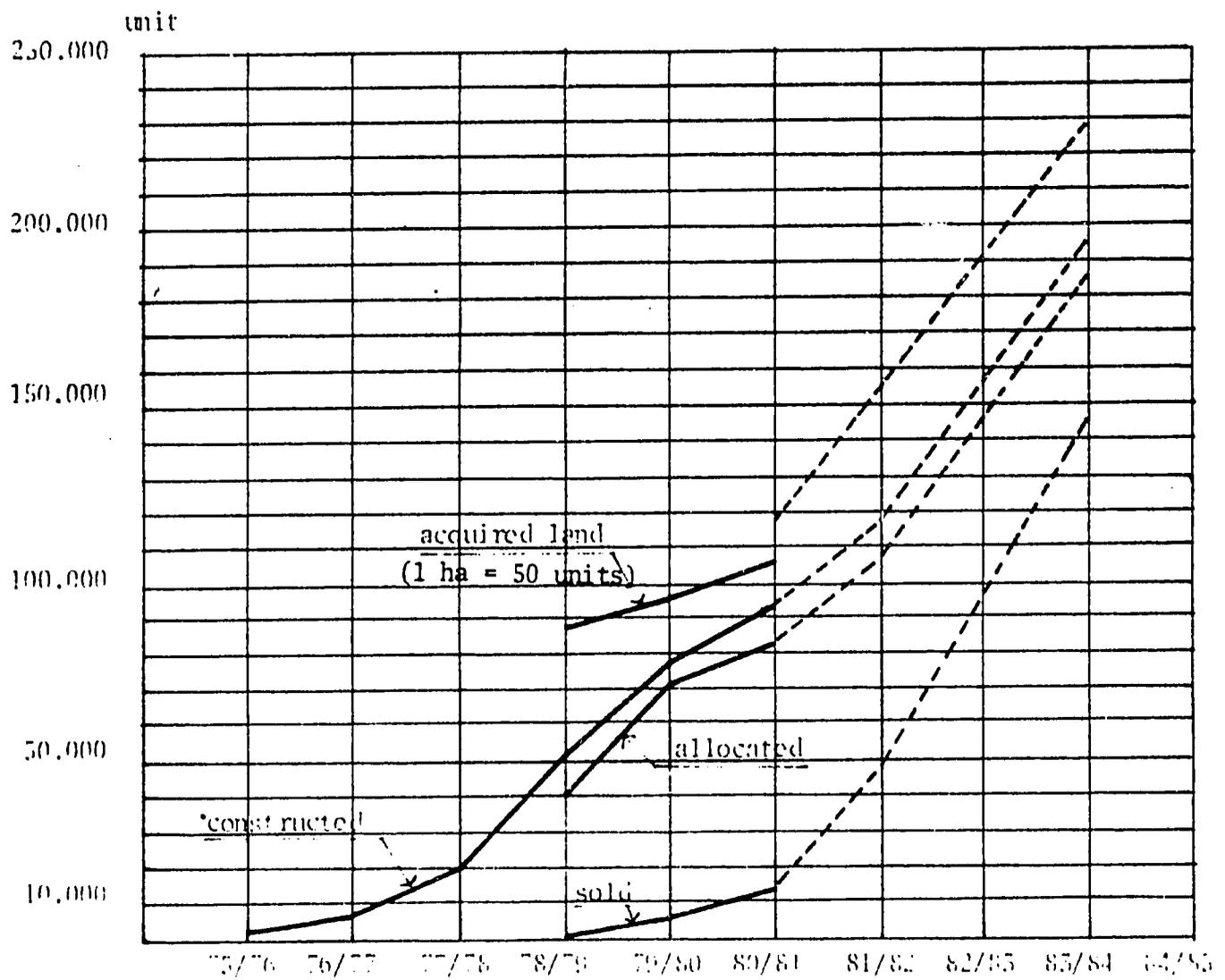
Figure - 3

TABLE - 5.
REALIZATION AND PROGRAM OF PERUMNAS

SUB PROGRAMME	TOTAL PELITA II	1979/1980	1980/1981	1981/1982	1982/1983	1983/1984 (Projection)	TOTAL PELITA III	TOTAL PELITA II/III
LAND ACQUISITION (Ha)	1,810.6	465.2	756.8	860.7	1,541.6	2,819.4	6,443.7	8,254.3
PLANNING (Ha)	1,765.1	249.1	115.0	912.5	2,076.7	2,114.0	5,467.3	7,232.4
CONSTRUCTION (Unit)	50,670	26,243	14,700	10,203	42,350	48,811	142,307	192,977
ALLOCATION (Unit)	38,380	32,346	10,668	15,243	47,529	48,811	154,597	192,977
SALE (Unit)	350	4,617	7,475	26,869	57,578	47,578	143,601	143,906

Source : Program 1982/1983.

Figure - 4.
CUMULATIVE PROGRESS AND PROJECTED PROGRAM



difficulties of a new organization, such as the recruitment of qualified staff and the development of organizational and management procedures. One of the most severe problems is that of land acquisition. The procedures for acquiring land is under the control of other institutions and local government; it is often long and tedious.

The most severe constraint during Pelita III is actually the extensive distribution of project locations. In Pelita II, Perum Perumnas had to operate in 17 sites which were located mostly in relatively big cities, but now in Pelita III, Perum Perumnas has to operate in about 100 cities which in many cases are rather remote. The criteria for selecting the locations of Pelita III housing program are as follows: (see Figure - 5)

- a. All capital cities of the 27 provinces (27 cities).
- b. All capital cities of the Regencies with a population of more than 100,000 inhabitants in 1971 (17 cities).
- c. Cities as the center of regional development, with a population of more than 50,000 inhabitants in 1971 (33 cities).
- d. Other cities or towns of which the growth should be induced by a housing program, or a housing program is needed because of disaster (estimated for 30 cities).

Other problems during Pelita III are more in the field of estate management, but steps are being taken jointly with BTN to set up an appropriate system in selecting applicants and in collection of the installments.

BUDGET

To implement the National Housing Program (draft, planning, implementing, evaluating stages), the Perum Perumnas acquires its financial resources from the government, rental loans or revenues lands, and other facilities built by Perum Perumnas. According to the Presidential Decree no, 29, 1974, article 7,

the capital value of the corporation is a state asset, thus there are no share holders.

Additional capital funds have been acquired as shown in Figure - 6.

1. Government Capital through the state budget from APBN including investment and exploitation expenses.

2. Loans include:

Loans from foreign countries among them the International Finance Institution and from countries who have sympathy towards the Government development program.

Loans acquired from the state banks within the country.

3. Revenue from its own efforts in developing funds includes:

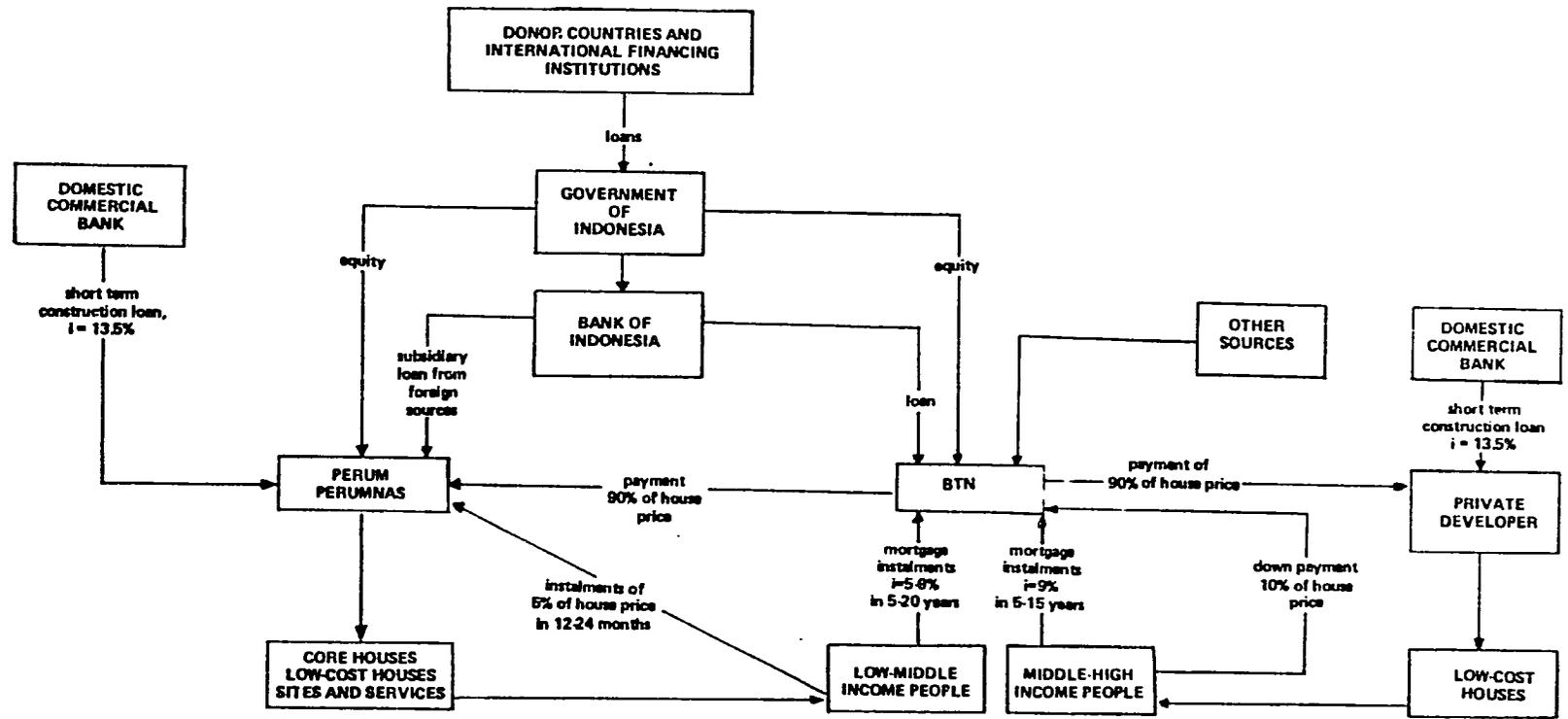
- Housing and land rents acquired from tenants.
- Tenants can obtain housing loans from the BTN (State Savings Bank).
- Revenue from rent/sale of open big plot and the commercial facilities developed by Perum Perumnas in a settlement area.
- Revenue from Government Employee Housing and housing on open plot areas.

IV. THE RELATIONSHIP OF PROJECT AND PROGRAM DESIGN TO INDIVIDUAL HOUSEHOLD INCOME AFFORDABILITY LEVELS.

The target group for Perum Perumnas housing is qualitatively defined as the low-middle income people or somewhat equivalent with level I and II government employee salary scale. To be able to quantify the target group depends on many assumptions and data availability, and in many cases is actually not simple.

Based on the available data from the Central Bureau of Statistics, the distribution of household income in 1979 for urban areas (see Figure - 7) shows that people who had income between Rp,20,000 to Rp,90,000 were about

Figure - 6.
HOUSING FINANCIAL FLOW



60 - 70% of the urban population, or approximately represents the 20th to the 80th percentile. On the other hand, government employees who have the same income range are approximately level I and some part of level II and above, depending on the family size and years of service. However, several experts still believe that actually their real incomes are higher than the above figures due to some differences in the definition of income, especially among the people themselves.

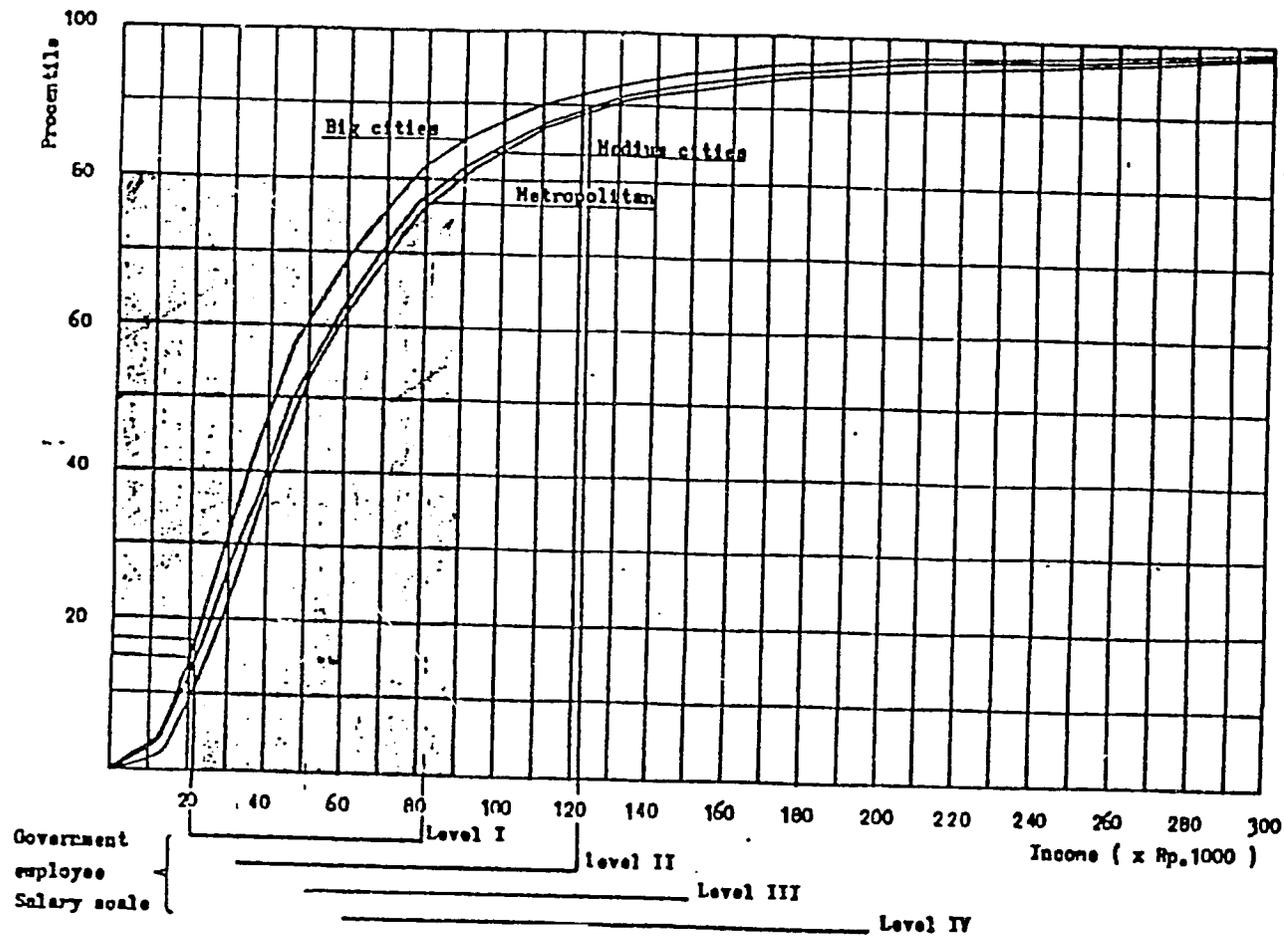
Considering the above facts, Perum Perumnas adopted a planning standard which can be regarded as substandard compared to the required standard of the National Building Codes and local government standards. Table - 5 shows various types of houses (presented in core-house or house size in sq. m. on plot size in sq. m.) provided by Perum Perumnas in relation with the target group and their approximate distribution. In this case, non-fixed income people (PTT) are also included in the target group. Houses built by Perum Perumnas (starter houses) are expected to be expanded to reach an assumed maximum house size by the people themselves. On the contrary, the open plots (sites and services) are provided for higher income people to be able to implement the cross-subsidy principle.

Affordability calculations are actually based on an adjusted 'Bertaud Model' which was developed in relation with the World Bank assistance.

In this case, the 'trade-offs' are concentrated in the adjustments of housing size, completeness of house facilities (doors, windows, ceiling, etc.) and infrastructure standard, to be able to balance the variable local factors such as land price, cost of building materials, cost of living, etc.

In terms of eligibility of applicants, for the time being priority is given to government employees of the first and second level of the lowest

Figure -7
HOUSEHOLD INCOME DISTRIBUTION
IN URBAN AREAS (1979)



Source : Central Bureau of Statistics

Table - 6.
PERUMNAS HOUSING TYPES

TARGET GROUP	ON PLOT DEVELOPMENT	STARTER HOUSE/PLOT TYPE M2	MAXIMUM EXTENSION	APPROX DISTRIBUTION (%)
P T T	SUB CORE HOUSE	15/60	36/60	40
LEVEL I	CORE HOUSE	18/72	45/72	
LEVEL II	CORE HOUSE	21/90	54/90	40
LEVEL III	LOW-COST HOUSE	30/120	70/120	
LEVEL IV	OPEN PLOT	- /160 - /200 - /300		20

Source: Pedoman: Perencanaan 1981/1982.

salary scale, about 75% of the available houses. About 15% are allocated for private employees with fixed income equivalent to levels I -II of government employees, and about 10% are reserved for the resettlement programs of other government projects and for natural disaster victims. The allocation criteria as mentioned above are rather flexible, and in many cases were adjusted proportionally to the local demand.

The financial terms available to the eligible applicants, and the inter-relationships of various institutions and financial sources, are shown in Figure - 6.

DESIGN AND CONSTRUCTION

Techniques for designing and constructing housing should not be a problem for Perum Perumnas, since the products are very simple structures. In reality, most of the people are able to construct their own houses with appropriate localized techniques according to their own budget limitations. The provision of infrastructure and other community facilities, on the other hand, cannot be provided by the people, but the local government should be responsible for its provision. This is actually the biggest problem in many cities in Indonesia; the ability of the local government is far behind the need and demand of its inhabitants for residential, commercial, industrial, and other related urban functions.

Based on the awareness of the urban problems in general, and the constraints to solve them, Perum Perumnas' strategies are directed more to inducing the "self-help" ability of the people by providing a minimum of plot development and providing maximum urban infrastructures and facilities.

However, Perum Perumnas is still facing problems due to the extensive project locations, the availability and cost of standardized building materials, the ability and workmanship of contractors, and in some cases, the willingness

of the local governments to cooperate. To minimize the problems, Perum Perumnas has taken the following steps:

1. maximum utilization of local building materials;
2. maximum participation of local contractors, local government and other agencies responsible for urban infrastructure;
3. important building materials, such as portland cement and asbestos cement roofing, wood components (for frame of window & door), wall materials (concrete block), etc. could be supplied by Perumnas;
4. application of appropriate construction management, especially in the field of project control and supervision and administration of contract payments; and,
5. utilization of labor-intensive methods for semi-prefabricated construction systems as a possible alternative to the conventional construction system. This system is suitable for remote areas, whereas the construction materials are supplied from the center (Jakarta).

V. CONCLUSIONS

Techniques for each activity of Perum Perumnas' operations, such as planning and design, construction, allocation and sale and finance, are available and actually not so difficult to master. The most difficult problem for Perum Perumnas is actually the extensiveness of project locations. In this case, the role of management and data processing are very important and probably are the key factors for a better future operation.

Problems and mistakes which were made in the past, and on the other hand also experiences, should be shared and discussed to search for ways and means to improve the future program. In this case, the 4th International Shelter Workshop will be an excellent opportunity.

THE FOURTH ANNUAL INTERNATIONAL SHELTER
WORKSHOP FOR SENIOR PROFESSIONALS
WASHINGTON, D.C.

STAND PIPE LANE 'INFORMAL' COMMUNITY, KINGSTON, JAMAICA
TO BE UPGRADED BY THE MINISTRY OF HOUSING:
FINANCED BY JAMAICA MORTGAGE BANK (UNDER 532-HG-010 PROJECT)

STAND PIPE LANE

The Stand Pipe Community is a densely populated area with about 140 households. The 1970 census found this area with 840 people while the present survey covered 877 people - giving a growth rate of 6.9% per annum. (of the Kingston growth rate is 4.3%).

Stand Pipe is bounded by Confidence View Lane on the West, Stand Pipe Lane on the South and Cedar Valley Lane on the East and North. Apart from the abovenamed roads which circle the community, vehicular traffic has no access to those houses in the interior of the community. There are three main footpaths going through the area, and a Gully divides the community.

There is a stand pipe in each of the 3 footpaths which is the main source of water supply.

All households in the community were approached, with a view to their taking part in the survey. There were however 27 people who either refused to give or gave inadequate information.

The report is presented in 3 parts:

1. The household
2. The Living Conditions
3. Needs and Attitudes of the people

1.. THE HOUSEHOLD

TABLE 1: SEX OF HOUSEHOLD HEAD

	MALE	FEMALE	TOTAL
No.	109	104	213
%	51	49	100

Table Number 1 shows that male and female household heads are almost equal in number. This situation is not uncommon in low income communities.

COMMUNITIES	% FEMALE HEADS OF HOUSEHOLD
McVille Ter	24
Fordben Lane	40
58 Mountain	36
Stand Five	49
35 Waltham	30
86 1/2 Maxfield Ave	43
57 Waltham	51

It should be noted, however, that some of the household heads who are female have resident male partners, but because they are unemployed, it is the working female who acts as the breadwinner and the head of household.

TABLE 2: AGE OF HEAD OF HOUSEHOLD & NO. OF PEOPLE IN HOUSEHOLD

	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	No response	TOTAL
1		10	5	4	3	6	5	2	5	45
2		10	6	7	3	2				38
3	1	10	2	7	2	2				24
4		14	10	5	5	7				53
5	1	20	7	5	2	7	2			56
6		5	3	3	2					23
7		5	5	7	5					27
8		2	3							5
9			5							5
10										0
11			7		2					9
12				7						7
13				7	2					9
Total	2	65	47	22	37	12	7	2	5	160
%	1	40	29	14	23	8	4	1	3	100

Table 2 shows that 40% of the household heads are under 30 years of age, and a further 62% are under 40 years of age. The average age is however 38 years. The relative youth of most of the household heads suggests that the organisation of the community may be that much easier as the element of antagonism between the youth and the older heads should be much smaller. This table also shows that since the household heads are young, the family sizes are small, 29% of the households consist of only one or two people, and the average household size is 4.17 which is smaller than all other communities studied.

COMMUNITIES	AVERAGE FAMILY SIZE
Neville Terrace	5.4
Forsten Lane	
58 Mountain View	5
33 Waltham Park Road	5.4
86½ Maxfield Avenue	5.1
57 Waltham Park Road	3.7

TABLE 3

MARITAL STATUS

MARRIED	COMMON LAW	SINGLE	DIVORCED WIDOWED	TOTAL
60	60	100	3	213
23	28	47	2	100%

The above table shows that 51% of the heads are in some marital union, whether married or common-law, while 47% are single. The fact that say few household heads are in a union, further explains the relatively small family sizes. Many of those "heads" who are single are women with one or two children, but no resident partner.

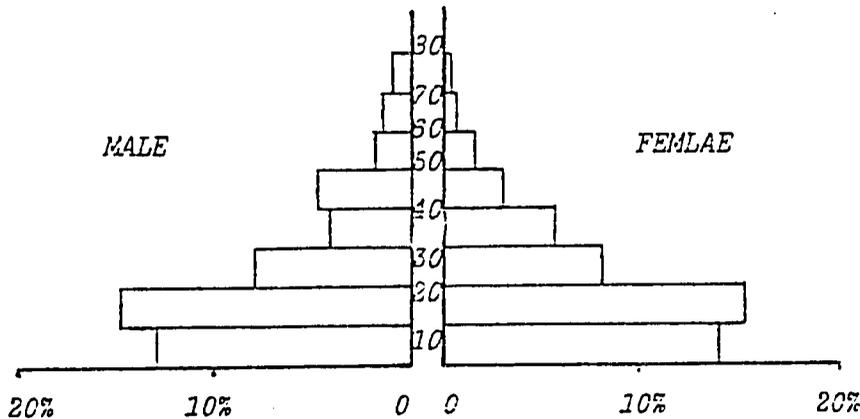
TABLE 4

AGE OF CHILDREN

0-3	4-5	6-12	13-17	18-21	Over 21	None	No. Resp.	Total
102	58	188	87	37	31	57	5	564
18	10	33	15	7	5	10	2	

Table four gives the ages of children, and it shows that children of Primary School age amounts to 33% of all the children. There are only 3 Primary Schools in the area - Providence, Mona Primary and Hope Valley Primary, all of which have enrolments well in excess of their capacity, not to mention the number which are turned away. There is undoubtedly a great need for a Primary School in this area.

TABLE 5 PERCENTAGE AGE DISTRIBUTION OF POPULATION



The population pyramid above gives a picture of the age and sex distribution of the total population in Stand Pipe. It shows that the majority of the people are in the age of dependency - either too old to work (few) or too young to work or unemployed. 60% of the population is under 20 years of age while the ratio between the dependent and working population is 1.6. An unusual aspect of this pyramid is the fact that those youths between the ages of 10-19 outnumber those in the 0-9 age group. This suggests that in this area there may be an ever greater problem associated with the alienation of the youth, which is found in most Jamaican communities today.

<u>COMMUNITIES</u>	<u>% UNEMPLOYED</u>
Stand Pipe	43
MacVillie Terrace	29
33 Waltham Park Road	21
57 Waltham Park Road	57
86½ Maxfield Avenue	54
Ford Pen Lane	38

The unemployment rate for Standpipe (48%) is among the highest of the communities studied. This could be related to the high number of young people and household heads in the area. This figure has remained constant as the same proportion of people claimed to have been unemployed during the previous twelve months.

TABLE 6: TYPES OF TRADE

Carpenter Mason	Plumber	Steelman	Machine Oper.	Tailor Dress- maker	Electrical Serviceman	Mech- anic	Cook	Paint- er	Public Tech.
13	5	1	2	14	13	4	7	4	3
6.11	2.34	0.46	0.95	6.57	6.11	1.87	3.28	1.87	3.33
Chaffeur	Printer	Stockman	Hair- dresser	Typing	Weaving	Jew- eller		NO TRADE	TOTAL
1	1	2	2	2	2	1		137	213
0.46	0.46	0.95	.95	.95	.95	.46		64.31	100

The high rate of unemployment may be partially explained by (1) the paucity of skilled people in the area (See Table 6) (2) the low level of education (see Table 7).

Table 6 shows that 64% of the household heads have no particular skills. The most common skills of the remaining 26% of the heads are those associated with construction, that is, masons, carpenters, electrician, plumber, painter, etc. Two other Trades which are outstanding are that of tailor/dressmaker and the electrical serviceman.

TABLE 7: LEVEL OF EDUCATION

	PRIMARY	SECONDARY	NO SCHOOL	OTHER	TOTAL
Head	168	27	14	4	213
	78%	13%	7%	2%	100
Partner	81	19	7	3	110

The above Table shows that most (78%) household heads only attained a primary level of education, while 13% went on to secondary school. A significant 7% did not go to school at all. The level of education attained by partners is generally lower than that of the household heads, and a greater proportion did not go to school.

TABLE 8: OCCUPATION OF HEAD/HOUSE PARTNER

	Carpenter	Fabricator	Domestic Help	Housewife	Flower Bar	Mach. Oper.	Clerk	Electrician	Mason	Professional	Partner	
HEAD	4 1.97	4 1.87	32 15.02	37 17.37	23 10.79	4 1.87	6 2.84	6 2.75	5 2.34	11 5.16	4 1.87	1 .46
PARTNER	-	-	3 1.06	21 21.42	35 37.72	-	2 1.04	3 1.06	-	-	2 2.04	-

Two related factors explain Table No. 8 which shows the occupation of the Household head and Partner. They are (1) the low level of education (2) the fact that almost 75% of the household heads are female. This means that the occupation of domestic help is one which occupies the greatest proportion of people both heads and partners. That of common labourer follows. Other occupations requiring skills such as carpenter, mason, electrician are there, but in the minority. It therefore follows that the income level for most people would not be very much above the national average.

TABLE 9: WEEKLY INCOME OF HOUSEHOLD HEAD

Head of Household	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	No. Income	TOTAL
	5	7	43	56	23	8	4	7	58	21%
	2%	3%	20%	26%	12%	4%	2%	3%	27%	100%

The above table shows that most household heads earn between \$20-\$40 per week. The average income is \$39.7 per week, but only 21% earn above this amount. The income information on the partners was inadequate, but it seems that most partners earn only between \$20-\$30 per week. It is noticeable that while there are 43% unemployed, those with no stated income amount to 27%. This suggests that there is a great deal of hustling, gambling, etc. in the community. This is the only way that the unemployed can survive.

TABLE 10: SAVINGS

Best Available Document

PARTNER	BANK	CREDIT UNION	BUILDING SOCIETIES	INSURANCE	SAVING	TOTAL
22	81	6	1	14	107	231
10%	35%	2.5%	.5%	6%	48%	100%

This is the first community encountered in which such a great proportion (48%) of the household heads do not save. In Marietka where the average weekly income is \$35, only 17% do not save. Similarly in Macville Terrace, where the weekly income is \$36, 24% do not save. It will be interesting to see if this attitude towards savings is in any way related to the conception of community, and how the householders view their future. Of those who save, the bank is the most important institution followed by the "partner". (In most other communities bank and "partner" are of equal importance as means of savings).

11. THE HOUSES

TABLE 11: TENURE

	OWN	LEASE	TENANT	SUB-TENANT	RENT FREE	SQUATTER	TOTAL
	23	59	111	2	12	6	213
%	10.79	27.69	52.13	0.93	5.63	2.83	100

Stand Pipe is not a squatter community, as shown by Table 11. It is a 'tenant' community, which is held together, by there being a common Landlord. Over half the residents are tenants (or sub-tenants), 27% are Lessees, and only 11% own their homes.

TABLE 12: RENT PER MONTH AND LEASE PER YEAR

RENT PER MONTH	\$1-9	10-19	20-29	30-39	40-49	50-59	60-69	Over \$70	Rent Free	No. Resp.	TOTAL
		22	60	11	8	1	2	3	3	41	5	154
	14.28	38.96	7.14	5.19	.65	1.28	1.95	1.95	20.64	1.95	100
LEASE PER YEAR	6	14	5	6	4	1	9	5		9	72
	10.18	23.72	8.47	10.18	6.77	1.69	15.26	8.47		15.26	100

The majority of renters pay between \$10-12 per month. It should be remembered that most families live in one room, and the charge of rental, is separate and apart from that for water and electricity which may add as much as \$20 per month for those who have these facilities. The range of rentals paid is high as it exceeds \$70 which is not usual for a low income community. It is suspected that due to its proximity to the University, a number of students may live there which would inflate the rentals.

TABLE 13: SHARING OF HOUSE/YARD

	1	2	3	4	5	6	7	8	9	TOTAL
HOUSE	137	37	18	11	5	-	1	3	-	213
	65	18	9	5	2	-	1	1	-	%
YARD	60	50	39	28	15	-	5	13	6	216
	28	23	16	13	7	-	2	6	3	%

TABLE 13 above shows that while most houses (65%) are occupied by one family; the yard space is more often shared by two or more families. Only 28% of the yards have 1 family, while 50% of the families live in yards where 3 or more families also live. There are yards where up to 9 families live. Therefore, if the upgrading of this area becomes a reality, the issuing of leases to the residents will be a great problem as so many share a common lot.

TABLE 14: HOUSEHOLD DENSITY

	NO. OF PEOPLE													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	33	25	17	19	11	3	4	6	3		2			125
2	1	5	5	4	11	5	2	2	1	1	1			38
3	1	1	2	4	7	6	6	1		1	1		1	34
4				2	3	1	2	1	1			1	1	10
5			3		1		4							8
6												1		1
TOTAL	35	31	27	29	33	15	18	10	5	2	4	2	2	213
%	16	15	13	14	15	7	8	5	2	1	2	1	1	100

In Stand Pipe 57% of the people live in one room houses, while only 33% live in 2 or 3 room houses. Table No. 14 shows that while up to 11 persons live in 1 room, it is also true to say that the number of rooms increases as the size of the family increases, until a maximum of 7 persons per household is reached. Thereafter the number of rooms again decrease. The average density per room is 4.33 persons, and 56% of the families are larger than this amount. The average household size in Standpipe (4.17) is smaller relative to other squatter settlements (see Page) therefore it is not surprising that the density per room is also smaller (by 1) than in the other areas. It is however true that the density of the houses on the land is high, there being only narrow footpaths, and no roads within the community.

TABLE 15: AVAILABILITY OF WATER

Water in House	Stand pipe	Water in Yard only	TOTAL
7	92	114	213
3.28	43.19	53.52	100

The above table shows that only 3% of the households have running water in their houses, while 54% have water in their yards. The latter live fairly near to the standpipe, and attach pipes from it into their yards. The 43% who get water from the standpipe live far from it.

TABLE 16:

TYPE OF LIGHTING

ELECTRICITY	KEROSENE	NO RESPONSE	TOTAL
120	90	3	213
56	43	1	100%

Table 16 shows that electricity and kerosene is used for lighting by roughly equal amounts of people. There is a need for further spread of electricity as it is no longer a luxury, but a necessity in this age.

TABLE 17: TOILET FACILITIES

CLOSET	LATRINE	NONE	TOTAL
76	135	2	213
30	68	1	%

Pit Latrines are still used by most people (63%) due to the unavailability of waterpipes, and 30% have water closets.

TABLE 18: BATHING FACILITIES

HOUSE	YARD	TUB IN YARD	TUB IN HOUSE	TOTAL
17	108	58	30	213
8	51	27	14	%

59% of the people have showers mostly in the yard, but 41% have no bathing facilities, and simply bath in a basin in the house or behind an enclosure in the yard. Most people (65%) have a kitchen separate from their living area. 35% cook inside their room, of those who have a kitchen almost all ^{must} share it with other tenants in the yard. Thus one structure will have 2 or 3 stoves and tables, for each householder. This must create problems associated with lack of space, and confusion of cooking utensils and food etc. The only way to solve this problem is to give some privacy to the householder now living there, and this can only be obtained by ^{an} increase of space per household.

TABLE 19: CONSTRUCTION OF HOUSES

	BOARD	CONCRETE	PACKING BOARD	ZINC	TILE	OTHER	TOTAL
HOUSE	140	70	1			2	213
	66%	32%	1%			1%	
ROOF				211		2	213
				99%		1%	
FOUNDA- TION	120	55			38		213
	56%	26%			18%		

TABLE 19 shows the materials from which the houses are constructed. About $\frac{1}{5}$ of the houses are wood and 56% have board floors which means they may be moveable. The remaining number of houses are of concrete with either tile or concrete flooring which means they cannot be moved.

TABLE 20: CONDITION OF HOUSE

	GOOD	FAIR	BAD	TOTAL	%
MOVEABLE	8	43	41	92	43.19
NOT MOVE- ABLE	26	56	39	121	56.81
TOTAL	34	99	80	213	
%	16	46	38		

On the opinion of both the interviewer and the residents, it was judged that about 63% of the houses were in good or fair shape. 37% were thought to be in bad condition. Since this is mainly a tenement community few people have the incentive to spend the money to fix houses which they may be evicted from at some time. In spite of this as many as 37% of the people claimed to have built their own and they are probably the lessees and the owners.

TABLE 21: LENGTH OF RESIDENCY

Under 1 Yr.	1	2	3	4	5	6	7	8	9	10-14	15-19	Over 20	No Resp	TOTAL
12	29	12	26	14	10	6	7	10	4	13	11	37	22	213
5.63	13.61	5.63	12.20	6.57	4.69	2.81	3.28	4.69	1.87	6.10	5.16	17.37	10.32	100

In spite of the insecurity of tenure, the Stand Pipe community has been in existence for over 20 years. In fact a few of the older people have been living there for over 50 years, 29% of the residents have been there for over 10 years. But 44% have moved in within the last 5 years. It seems that the boundaries of the community have remained constant, but the number of families have increased many times over, thus greatly increasing the density of the houses.

111. THE NEEDS AND ATTITUDES OF THE PEOPLE

TABLE 22: REASON FOR LIVING IN STAND PIPE

BETTER AREA	GOT NOTICE	GOT HOUSE	GOT LAND TO LEASE	GOT MARRIED/PREGNANT	FOR THE CHANGE	
50	30	9	22	8	13	
23.47	14.06	4.22	10.52	3.75	6.10	
Rent Cheaper	Wanted Work	Own Land	Born Here	Sold Place	No. Resp.	TOTAL
3	9	7	2	1	59	215
1.40	4.22	3.28	.93	.46	27.69	

In spite of the overcrowded conditions within Stand Pipe, about 1/2 of the people are there because they think it is better than where they were before, and 10% came because they got land to lease. For others, Standpipe was simply the only alternative which presented itself to the people looking for rooms.

TABLE 23: PREVIOUS PLACE OF ABODE

Kgn. 2	Kgn. 4	Kgn. 5	Kgn. 6	Kgn. 7	Kgn. 8	Kgn. 9	KGN. 10	Kgn. 11
3	1	15	112	7	11	1	3	5
1%	.5%	7%	53%	3.3%	5.5%	.5%	1%	2.5%

Most people came into Standpipe from the adjacent areas - 53% from Kingston 6, and 4% from Kingston 7. The more distant areas of Kingston - Kingston 5, Kingston 11, had a significant few, and the rural areas supplied very few people.

TABLE 24: DESIRE TO MOVE AND REASON

Wanted to Move	Reason	Wanted to Stay	Reason	Don't Know	TOTAL
73	Don't like the area	93	Like the area	25	215
16	Want House				
6	Want water				
95		93		25	215
44.60		43.66		11.74	100

Approximately half of the present number of household heads are not unhappy with the conditions in Standpipe. Most simply do not like the area because of its overcrowdedness, others either want water, or a house of their own. The remaining household heads are either content to remain or are undecided.

It follows then, that about 42% find their houses comfortable, while the rest are desirous of better accommodation, more space, and better facilities. Those who wish to remain (i.e. 42%) are interested in improving their own house, mostly by a small loan. Only 23 people are able to improve their houses on their own.

TABLE 25: NEEDS OF THE AREA

Road	Water	Light	Health Centre	Telephone	Good House	Fire Station	Training Centre	TOTAL
145	140	105	19	7	60	1	7	447
35%	29%	22%	3.5%	1%	13%	.5%	1%	10%

Undoubtedly, roads and water are in greatest demand by the people of Standpipe, and to a lesser extent - light. There are other suggestions such as Health Centre, Training Centre, Good houses.

TABLE 26: PRESENCE OF RELATIVES

		<u>RELATIVES</u>			
		YARD	AREA	NO RELATIVE	TOTAL
No.		25	70	118	213
%		12	33	55	%

The community seems to have many people who are kin living there. 12% of the people have relatives in the same yard, while 33% have in the area. 55% have no relatives nearby.

TABLE 25: RELATIONS OF THE PEOPLE

	Good Relationship	Fairly Well/ Few Quarrels	Bad Relationship	No. Response	TOTAL
	104	82	16	11	213
%	49	38	8	5	100

The numerous family ties, probably promote good relations in the community as half the household heads were able to confirm, 38% of the heads said that only few quarrels occurred and that interpersonal relations were fairly good. Only 8% of the heads complained that relations were bad. As usual it is personal business, followed by children that are usually the topic of the quarrels. The close proximity of people's houses and the sharing of the facilities, makes it difficult for good relations to be maintained.

TABLE 26: TOPIC OF QUARRELS

FACILITIES	PLACE	NOISE	CHILDREN	POLITICS	BUSINESS	NO. RESP.
14	7	39	58		89	38
5	3	16	24		36	16

TABLE 29: SETTLEMENT OF QUARRELS

ARGUE	FIGHT	COURT	NEIGHBOUR	POLICE	TOTAL
204	4	-	2	3	213
95	2		1	1	100%

However, Table 29 shows that quarrels are usually remains at the talking level, rarely do fights occur, or is the police called.

TABLE 30: OCCURRENCE OF THEFT

YES	NO	NO RESPONSE	TOTAL
3	167	13	213
6%	88%	6%	100

Only 6% of the household heads were able to say that theft occurs within the community. It seems that the area is relatively safe.

TABLE 31: LACK OF TRUST

No. One	Only Family	Family & Friends	Most People	TOTAL
53	40	59	61	213
23%	19%	28%	28%	100%

In spite of the relative supply of the community, as many as 25% of the household heads say that they trust no one, while 56% of the heads trust family friends or most people.

The level of willingness to cooperate seems very low in this community in comparison to all others studied. Only 51% of the household heads expressed a willingness to take part in upgrading in the event of it reaching that area, and only 67% of the household heads thought that others would be willing. (This is one community that a programme to build community self interest and cooperation would have to be designed at the onset of the upgrading exercise.

TABLE 32A: KNOWLEDGE OF GROUPS

Liguanea Youth Club	Barbican Socialist Group	Liguanea Mutual Relief	Cedar Valley Fighters	Cedar Valley Youth	Matildas Corner Youth Gr.	Liguanea Socialist Movement	St. Margaret's Citizens Association	Pentecostal Church of Group	No. Resp	TOTAL
9	26	1	105	24	11	3	3	1	75	256
45	10%	1%	40%	90%	4%	1%	1%	1%	30%	100%

TABLE 32B: MEMBERS OF GROUPS

Liguanea Youth Club	Barbican Socialist Group	Liguanea Mutual Relief	Cedar Valley Fighters	Cedar Valley Youth	Matildas Corner Youth Group	Liguanea Socialist Movement	St. Margarets Citizens Association	Pentecostal Church Group	No. Resp	TOTAL
2	5	1	35	2	2	2	2	-	167	219
1%	2%	1%	15%	1%	1%	1%	1%	-	77%	100%

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OFFICE OF HOUSING AND URBAN DEVELOPMENT
AGENCY FOR INTERNATIONAL DEVELOPMENT

COUNTRY: JAMAICA

APPROACH TO LOW COST HOUSING IN JAMAICA

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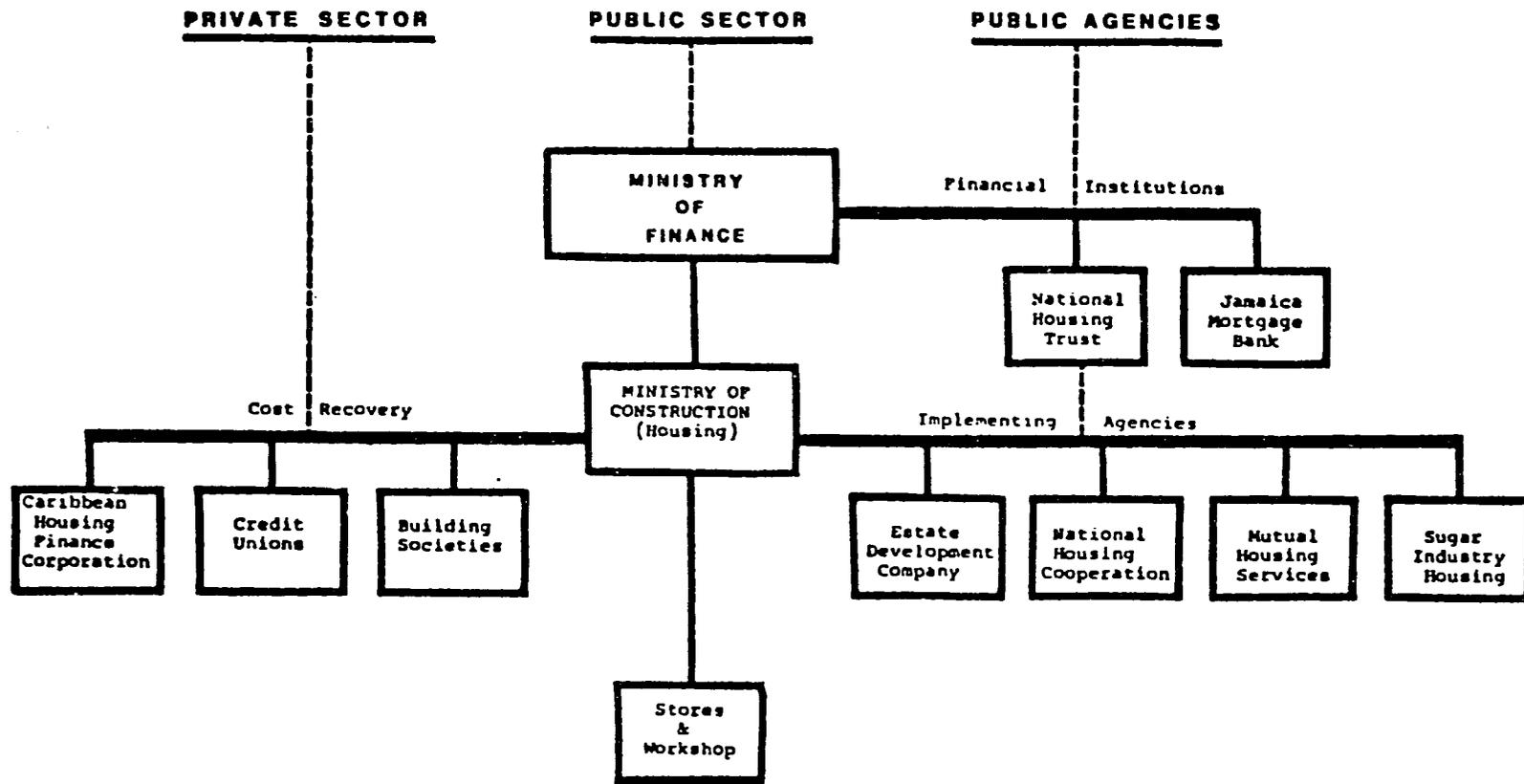
Introduction

Jamaica is an island in the Caribbean sea with a population of approximately 2.2 million people. It is approximately 4,244 square miles (10,991 sq. km.) in area and is located 90 miles south of Cuba. Per capita income in 1980 was \$1,240. Kingston, the capital, is located on the southeast coast with a population of approximately 644,000 people. The other city, Montego Bay, a famous tourist resort, is located on the northwestern coast.

One of the objectives of the Government is to provide low cost housing for the masses of people in Jamaica, whereas housing for the middle and upper income groups is provided by the private sector. In Jamaica, a number of private developers undertook the development of large projects ranging from apartment buildings, town houses and semi-detached units to large executive type bungalow houses for the middle and upper income groups. It was discovered, however, that a section of the middle income group, referred to as the low middle income group, was being neglected by the private sector. To this end the Government extended its program to cater to this group through one of its agencies.

However, the experience gained was the extent to which the Government was able to expedite its housing program, was somewhat dependent on the availability of funds from the Ministry of Finance out of revenue collections which is usually inadequate. Having identified this problem, two financial institutions were formed to supplement the funding of public sector programs.

This paper will define the role of the public sector and its agencies in their relationship with the private sector in the approach to provide low cost shelter for the people in Jamaica.



**PUBLIC AND PRIVATE SECTOR RELATIONSHIPS
FOR LOW-INCOME HOUSING IN JAMAICA**

1.0. FUNDING (J \$1.78 = U.S. \$ 1.00)

1.1. National Housing Trust

The Trust is a public financial institution which is structured to provide short-term and long-term financing to the public sector for housing. This public agency falls directly under the Ministry of Finance and gets its support from contribution paid in by each employer based on a 2 to 3 ratio. The breakdown of the contribution is as follows: Employee pays 2% of earnings up to a ceiling of \$15.90 per month. Employer pays 3%.

The funds are made available to the Ministry of Finance and other institutions related to financing housing.

1.2. Jamaica Mortgage Bank

This institution is the medium through which foreign housing guarantee loans are negotiated and funds made available to the Ministry of Housing for the implementation of its AID programs.

The Bank also procures local loans from other institutions and provides a secondary market operation for mortgages. It also insures mortgage loans.

1.3. Ministry of Finance

The Ministry of Finance provides through the budget, government contribution to the Housing Fund which is administered by the Ministry of Construction Housing to provide low cost housing for the nation. Although the output of houses has increased over the past seven years, the Government's contribution to the Fund has decreased due to the role of the National Housing Trust in providing supplementary financing.

The Ministry of Finance is actively involved in the negotiation of foreign loans for housing and in turn monitors the projects they support.

The benefits derived from these loans are twofold:

- (a) They provide direct funding for the Sites and Services Projects and also for the Squatter Upgrading Program.
- (b) The foreign exchange earned from the loans is of paramount importance to the Ministry of Finance, due to the acute shortage in this area.

2.0. MINISTRY OF CONSTRUCTION HOUSING PROGRAMS

2.1. Building Research Unit

Due to the escalation of the cost of building materials over the past five years, the Ministry has set up a unit to do research in this area.

2.2. Introduction to the Housing Fund

This Fund falls under the auspices of the Minister of Construction Housing and is governed by a specific law known as the Housing Act.

It is funded by:

- (a) Government contributions to the Housing Fund.
- (b) Revenue collected from allottees on various housing schemes built from the Housing Fund over the past twenty years.
- (c) Sale of mortgages to financial institutions such as the National Housing Trust and building societies.

2.3. Stores and Workshop

This division of the Ministry plays an important role in the provision of low cost housing.

The stores are involved in the bulk purchasing and stockpiling of all the building materials used by the plant, e.g. cement, steel, timber, paint, locks, nails, glass, etc., 80% of which is manufactured locally. All the materials are purchased from the Housing Fund, some

are transferred to the Workshop for the prefabrication of components for various housing units, other materials are delivered with the components for direct use on the different sites, such as paint and locks.

The Stores in turn receive the prefabricated components from the Workshop for safekeeping in the warehouses, awaiting requisition for delivery to various sites. The Workshop prefabricates components made from cement and steel as well as components made from timber. The Workshop charges the Stores for the prefabrication of the components, the stores in turn charge the projects for the components plus a 7½% service charge.

2.4. Rental Schemes

It is not common of the Government to provide housing for rental. However, a few rental schemes exist, which were built some thirty years ago after Jamaica suffered severely from Hurricane Charlie. The experience is that the rent, which was fixed at that time for the tenants who were made homeless by the hurricane, has never been increased.

The result is that the cost of maintaining the units is many times greater than the rent being collected today. In any case, the buildings have depreciated to the extent that they are regarded as slums and will soon have to be demolished and rebuilt.

2.5. Indigent Housing

Housing is provided for the indigent who, it is considered, will never be able to repay the debt. This program is administered by the Ministry of Local Government, which sends an approved list of indigents to the Ministry of Construction along with a check to cover the cost of the units.

These units are prefabricated by the Workshop. It is basically a one-bedroom unit made from timber along with a po. latrine, total cost J \$4,500. The components are transported by truck to the site and construction is completed in two weeks by the contractor. The beneficiary should have the land available for this house to be erected. Failing this, a grant in cash is made to the indigent in lieu of the house, as a temporary measure until further assistance is given by the appropriate board.

2.6. Owner Occupier Scheme

This scheme is designed specifically for rural areas and the emphasis is on poor families who own land, but cannot afford to erect a house or acquire one in a project elsewhere. In any case, some of these people are small farmers and would not be interested in relocation.

They would apply to the Ministry of Construction Housing (which has an office in each Parish) for assistance under this program. The beneficiaries are required to submit their title for the land to the Ministry to be held as security until the cost of the unit is fully recovered.

There are two types of units: the 542A which costs J \$6,000 and has one bedroom, a living room, and a kitchen. The 604 unit has two bedrooms, a living/dining room, kitchen, toilet and bath costing J \$12,000.

The concrete components which make up these units are prefabricated by the Workshop and transported to the various sites by truck where construction is completed in three to four weeks.

Under this program, repair loans are also granted by the Ministry to those applicants who are recommended for same by an officer of the

Ministry based on inspection of the existing house. The loans are limited to J \$3,000 for each approval.

2.7. Sales Schemes

The Ministry undertakes a number of low cost housing projects islandwide. In each case a private contractor is engaged to subdivide a large area of government owned land and to put in the necessary infrastructure.

A number of prequalified small contractors would be engaged on the site to erect the houses, each one is given a quota.

Construction is done based on designs developed by the Ministry. The houses are of reinforced concrete. These houses are not prefabricated, therefore, it generates more employment for the labor force in these areas. The units are generally two and three bedrooms, the latter cost J \$35,000 with a living/dining room, kitchen, toilet, bath and verandah.

2.8. Slum Clearance

The Minister of Housing is empowered by the Slum Clearance Act to acquire and dispose of such buildings that fall within the area being declared a slum. In the process of doing this, houses of a more permanent nature are also demolished, the owners of which are given ex gratia payments as compensation.

The trend is to replace the old buildings with high rise buildings in order to cope with the vast number of persons to be re-settled in the area and to provide space for the erection of community centers, schools, parks, and other amenities that are designed for the project.

Due to the type of construction to be undertaken, small contractors are not used on these projects; instead, an established firm of contractors is engaged. It should be noted however, that the firm

of contractors generally recruit most of their labor force from the neighborhood.

2.9. Rent Assessment Board

The Rent Restriction Act is the legislation through which the Minister of Housing controls rent and attempts to create a balance between the landlord and the tenants throughout the housing sector. To this end, several boards have been set up with their support staff in a number of Parishes islandwide.

Both landlord and tenant must refer their case to the board for hearing. Each board has its support staff, including valuers who normally assess the premises based on which the judgment is made.

3.0. PUBLIC AGENCIES

3.1. Sugar Industry Housing

This is a public agency which is primarily concerned with providing housing for workers in the sugar industry throughout the island. The land is obtained from the sugar estates and development, both of infrastructure and the buildings, is undertaken by this agency.

Sugar industry housing is also involved in the completion of the Sites and Services Program under a new concept. Four Sites and Services Projects were financed by a World Bank loan which started in 1974. Two of these projects, Nannyville, which has 555 lots and De La Vega, which has 556 lots, were completed with the original concept.

The program was modified by the Jamaican Government whereby two incomplete projects, Hunts Bay with 1200 lots and Catherine Hall with 822 lots, were converted into a habitable core.

Each beneficiary is given one bedroom, a living/dining room, kitchen, and toilet. The units cost J \$17,000 broken down as follows:

J \$11,000 for the house, J \$6,000 for the land. A number of contractors are used in this project and they are supervised by the sugar industry housing. The lot size is 60 feet by 40 feet.

3.2. Mutual Housing Services

This agency specializes in housing cooperatives. The houses are generally of a cluster design, in some instances two story buildings and they cater to the sector ranging from low income to low middle income.

The funding of these projects are generally from local loans obtained from the private sector or the Ministry of Construction Housing.

3.3. National Housing Cooperation

This is the only government agency that concentrates on low middle income housing. It depends solely on loans from the local financial institutions in the private and public sector for funding. It operates on a commercial basis which prevents any subsidy to be passed onto this sector of the population.

3.4. Estate Development Company

This company is designed to carry out three main functions:

- (a) Plan and design all projects for the Ministry of Construction (Housing) and for those projects to be implemented by the Company.
- (b) Subdivide sites into lots, put in the necessary infrastructure and supervise the erection of houses on these lots by foreign investors.
- (c) Implement the Squatter Upgrading Program of the Ministry which is funded by United States AID HG loan.

There are approximately 300 Squatter Upgrading Sites islandwide of which, based on certain sociological surveys undertaken by the Ministry, three priority lists are compiled and those projects identified are in various stages of planning, design and implementation.

3.5. Cost Recovery

The policy being adopted will place the responsibility of cost recovery in the private sector, such as credit unions, building societies and financial institutions. The beneficiaries will therefore obtain their mortgages from the private sector and thereby relieve the public sector of that responsibility.

Some of the advantages to be gained from doing this are:

- (a) The sale of the mortgages to the private sector will provide the Ministry of Construction Housing with quick returns for reinvestment in low cost housing through the Housing Fund.
- (b) The private institutions are more equipped to collect mortgages since they are designed for this purpose which, of course, makes them more efficient.
- (c) By placing the responsibility for collection of mortgages in the hands of the private sector, it eliminates the possibility of political interference which could encourage delinquency.

JMB - US/AID HOUSING GUARANTY LOAN

The Jamaica Mortgage Bank is responsible for the financing and monitoring of the abovementioned loan which is used for the following subprograms:

- I. Urban Upgrading
- II. Squatter Upgrading
- III. Home Improvements

Urban Upgrading (Subprogram I)

This program was designed to make finance available to landlords in a targeted area so as to carry out repairs to their dwellings and to improve kitchen and sanitary facilities.

Squatter Upgrading (Subprogram II)

This program was designed to make finance available to the Ministry of Construction (Housing) for the implementation of squatter upgrading sites which are related to the JMB US/AID HG loan agreement.

1. The Ministry of Construction (Housing) is required to submit a package with respect to the proposed projects to the Jamaica Mortgage Bank with the following information:

- A. Social Economic Survey
- B. Land Tenure
- C. Cost Estimate
- D. Working Drawings
- E. Program Charts

2. Based on the abovementioned submission representative of the following agencies (US/AID, FCH, EDD and JMB) make assessment of the submission to ensure that it satisfied the loan agreement. If it is satisfactory, the Bank will make a submission to the Board of Directors for approval.

3. When approval is given, a letter of commitment is sent to the Ministry of Construction (Housing).

4. The Ministry will enter into contractual agreement with the successful contractor.

5. Request will be made by the Ministry of Construction (Housing) to the Jamaica Mortgage Bank for Mobilization advance which is 15% of the contract sum and payment for pre-purchase materials. These costs are recovered by means of deduction from payment certificates submitted by the Contractor.

6. The Ministry will request reimbursement from the Bank based on work in place.

A. Monitoring By Jamaica Mortgage Bank

With respect to the Monitoring of the projects, the Bank's Chief Project Officer carries out the following duties:

- (1) examine and report on the projects' plans;
- (2) visit projects sites, observe work in progress and ensure that the work is being done according to the specifications;
- (3) prepare progress reports with respect to sites;
- (4) maintain contact with consultants and personnel of the Ministry of Construction in order to be acquainted with problems; thereby helping to find solutions;
- (5) process claim for payment.

B. Cost Overruns

Although this monitoring takes place, the Ministry of Construction finds it necessary to make a request for increases in the commitments because of increases in the following:

- (1) preliminaries;
- (2) change from imperial units to metric;
- (3) inclusion of sewers;
- (4) rock volume;
- (5) labor;

(6) equipment;

(7) materials.

These are beyond the control of the Bank; however, steps are taken to ensure that if the cost goes above the affordability of the targeted group, the Government of Jamaica will subsidize the cost.

EXAMPLE

OUTFLOW COMPONENTS	ORIGINAL CONTRACT SUM	PROJECTED CONTRACT SUM	INCREASE SUM
Preliminaries	\$ 99,821.00	\$ 187,930.00	\$ 88,109.00
Culvert Drains	18,230.00	18,230.00	---
Retaining Walls	3,560.00	3,560.87	---
Water Supply	684,636.46	787,599.59	102,963.14
Roadworks	715,617.78	937,805.98	222,188.20
Sewer	206,765.50	481,365.00	---
Sewer Line to Public Main	24,790.00	24,790.00	---
Ponds	36,663.00	36,663.00	---
Contingency Sum	150,000.00	150,000.00	---
Anticipated Variation	---	136,848.00	136,848.00
TOTAL	\$1,940,084.60	\$2,764,793.00	\$550,108.34

PRELIMINARIES: Increase reflect change from 12 months' contract to 18 months. In addition, the scope of work was increased with the introduction of the sewer treatment plant. Within this grouping of costs, major increases have occurred:

PTO

-13-
EXAMPLE

ITEM	OLD BUDGET	NEW BUDGET
Survey & Setting Out	\$ 2,000.00	\$ 5,000.00
NIS & HGT	3,000.00	14,000.00
Watching & Lighting	20,000.00	37,400.00
Sanitary Facilities	2,000.00	5,000.00
End of Project Bonus	15,571.00	37,500.00
Water	---	8,000.00
TOTAL	\$ 42,571.00	\$ 106,900.00

In summary, what was \$99,821.00 for preliminaries based on a \$1.2 million project, is now \$187,000 due to extension of the contract time and scope of work.

WATER: This project was designed for 4" diameter, cast iron pipes, priced at \$4.50 per linear yards, this was replaced by 100 mm at \$8.58 per linear yard.

ROAD: Budgeted at \$5.50 per cubic yards for 9,500 cubic yards, to date 12,400 cubic yards have been removed at a rate of \$20.00 per cubic yards representing an increase of \$80,000 in excavation. Additional marle subbase \$34,000; timbering to excavation \$22,000.

SEWER: The original bill of quantities ommitted the item of lateral sewer connection and as a consequence, these items were introduced as a variation of \$137,300.

- (5) Labor)
- (6) Equipment) Increase is due to escalation.
- (7) Materials)

Standards

The upgrading standards are controlled by the Local Government agencies such as the Kingston and St. Andrew Cooperation (K.S.A.C.) for the city and the Parish Councils (P.C.) for the metropolitan area.

The inclusion of sewer systems is based on the size and location of the project. These factors contribute to the cost of the lots and they vary from one site to the other.

The following tables will show the difference in costs:

TABLE I
SEWERED PROJECTS

<u>Projects</u>	<u>Projected Cost</u>	<u>No. of Lots</u>	<u>Cost per Lot</u>
Norwood Pen	\$ 3,965,030	500	\$ 7,930
Succaba Pen	7,166,173	1,000	7,166
Curator Mill	2,764,940	400	6,912
Standpipe Lane	2,990,027	259	11,545
	<hr/>	<hr/>	<hr/>
	\$ 16,886,170	2,159	

Average Cost Per Lot = \$ 7,821

TABLE II
NON-SEWERED PROJECTS

<u>Projects</u>	<u>Projected Cost</u>	<u>No. of Lots</u>	<u>Cost per Lot</u>
Watham Park Road	\$ 290,283	99	\$ 2,938
Mackville Terrace	465,104	107	4,347
Cassaya Piece I	611,348	118	5,181
Cassaya Piece II	599,647	168	3,569

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Mackville Terrace	465,104	107	4,347
Cassaya Piece I	611,348	118	5,181
Cassaya Piece II	599,647	168	3,569
Tredeger Park	407,050	53	7,680
Tryall Park	1,250,000	316	3,956
Effortville	648,658	180	3,609
		<u>1,041</u>	

Average Cost Per Lot = \$ 4,106

Cost

The cost is equalized among similar scope projects which reflect a cross subsidy, so as to make it more affordable to the beneficiaries.

Although the beneficiaries in the non-sewered projects will pay 90% less than those in the sewered projects they are at a disadvantage in that they will have to construct their own sewerage disposal in the form of absorption pit septic tank or pit latrine which could cost from \$ 1,000 - \$ 3,000.

Leasehold

The loan agreement states that "Land lease means an agreement between the occupant of an improved lot for not less than forty-nine (49) years and establishing the payment of obligation of the occupants." This agreement is renewable.

"Land Lease Payment" means the payment required to be made by the occupant of an improved lot under a land lease which payment is computed on the basis of capital and financial cost for the land plus relocation costs and portion of infrastructure costs which are not recoverable through user charges. Based on allocation of infrastructure cost's design by the Ministry of Construction (Housing) the final cost chargeable to the beneficiaries of each lot is 60% of the project costs. The remaining 40% would be accounted for through user charges.

Freehold

The Ministry of Construction (Housing) will enter into a sale agreement with beneficiaries who are willing to buy their lots.

Market Program for the Squatter Upgrading Program

1. Staffing:

- Estate Managers (2)
- Estate Managers Assistants (2)
These should be experienced estate managers with expertise in rental or sales.
- Attorney-at-Law
Experience with real estate and contracts. Should be senior enough to be able to make commitments and decisions on behalf of the Ministry.
- Community Development Specialist (4)
Should have above average skills in communicating with people in formal and informal circumstances, good organizational and managerial skills also required.
- Secretarial-Clerk (3)
Previous experience in rental documents and contracts important, good organizational skills and communication abilities (verbal and written required).

Supportive staff will be necessary, but this need not be assigned on a fulltime basis, but simply made available as required from the local Housing Office.

2. Orientation and Preparations:

Before undertaking the schedule of events outlined below, the team will be oriented as to the structure of the program and the alternative and option available under the existing Program and policies. They will also have an opportunity to fine-tune the schedule of events according to their own prospective and to meet the circumstances that will be encountered during the execution phase.

The orientation period will also permit a start-up period for the development of materials and basic documentation to assist in the process. Every effort will be made to standardize marketing strategy, program and instruments; however, this is not to eliminate or narrow the alternatives and options available to the team to achieve the overall projects.

3. Marketing and Rental:

Upon arrival to an assignment area, the Task Force will undertake the following activities:

- set up offices at the nearest Housing Office or on-site where possible;
- visit the site and become familiar with the terrain and the various features of the development;
- arrange for the posting of a project sign and the circulation of promotional materials . . . indicating the Ministry's intention and the procedures and obtaining access to the lots. Use of flyers, newspaper and radio;
- schedule and arrange a general meeting with the affected household in the targeted area, the meeting is to lay out the procedures and explain the responsibilities of Government and the households;
- hold general meeting;
- maintain regular office hours as well as evening and weekend sessions to permit direct communication with the individual household from the targeted area;
- home visits with those household which have failed to communicate with the rental team;

- invite the household who qualify to enter into a Lease Agreement;
- revisit households who have not entered into an agreement, ascertained difficulties or problems which inhibit conclusion of Lease Agreement, seek solutions;
- finalize all contract agreements;
- return to site location as the schedule shall permit . . . this will represent a final direct effort by the team. Subsequent efforts will require inquiring by the interested parties and may require transport to local housing office or the central office in Kingston.
- finalize new agreement with those households who responded;
- provide notice of eviction -- or intent of eviction -- for those households who will not enter into an agreement with the Ministry.

The task force would move on to its next assignment.

4. Special Roles and Functions:

The Legal Officer will act for the Ministry and shall have complete powers to do so in those matters relating to the sales of the affected properties. In addition, the attorney will provide counsel to those households requiring assistance concerning matters arising from the agreement.

The local social worker will also be available to assist those households who may require special assistance in dealing with the socio-economic elements as they relate to the contracting for the purchase of the lots.

5. Execution of Sale Agreements.

In the preparation for the execution of the Sales Agreements, the task force, Estate Managers will carefully review the Application Form. When satisfied that everything is in order, the Estate Manager will prepare the following documents:

Sales Agreement

Certificate of Occupancy

Payment Book (containing coupons for 12 months)

Upon the completion of the execution of the Sales Agreement, the tenant will be provided with the following items:

- a signed copy of the Sales Agreement
- a Certificate of Occupancy
- Payment Book
- a letter providing instructions as to whom and where to make payments

6. Collection Procedures:

At the present time, the Ministry of Construction (Housing) is reviewing the situation regarding cost recovery and collection as it relates to its entire portfolio. The current procedures are internal and within the Ministry and they are totally manual in the tabulation and recording of all entries and actions. This system was adequate in the past, but today it exhibits a number of deficiencies which require immediate and remedial attention if it is to adequately service the current and/or additional workload. The Ministry is testing a computerized system for its World Bank projects. This system would be administered by private concerns as direct agents for the Government. Depending on the development of this option, the Settlement Upgrading could also be incorporated into this package.

The Ministry is committed to investigate these options and others, with regard to the Settlement Upgrading Program. A decision is expected by the an early date. The Ministry is interested in obtaining technical assistance concerning its collection efforts, to whatever extent AID can assist the Ministry, not only in investigating current conditions and alternatives, but in the long-term assistance of capital inputs and technical support, this would prove helpful.

MARKETING AND SCALES PROGRAM														
MAY '82	JUNE "	JULY "	AUGUST "	SEPT. "	OCT. "	NOV. "	DEC. "	JAN. '83	FEB. "	MARCH "	APRIL "	TOTAL LOTS	UNSOLD LOTS	
				X 100						<input type="checkbox"/>	<input type="checkbox"/>	107		ACKEE
		X 100	X 150	X 100						<input type="checkbox"/>	<input type="checkbox"/>	500		NORWOOD
								X 100	X 50	<input type="checkbox"/>	<input type="checkbox"/>	53		TREDGER PARK
	X 150									<input type="checkbox"/>	<input type="checkbox"/>	180	30	EFFORTVILLE
		X 100	X 100							<input type="checkbox"/>	<input type="checkbox"/>	424	99	CURATO
							X 75	X 50		<input type="checkbox"/>	<input type="checkbox"/>	517		SUCCABA
					X 100	X 50	X 50	X 100	<input type="checkbox"/>	<input type="checkbox"/>	30 27	477	646	SUCCABA
					X 100	X 18				<input type="checkbox"/>	<input type="checkbox"/>	118		CASSAVA I
				X 100	X 69					<input type="checkbox"/>	<input type="checkbox"/>	169		CASSAVA II
				X 99						<input type="checkbox"/>	<input type="checkbox"/>	99		WALTHAM PK. RD.
					X 120	X 150				<input type="checkbox"/>	<input type="checkbox"/>	270		TRYALL HCS.
				X 115	X 100					<input type="checkbox"/>	<input type="checkbox"/>	215		STANDPIPE LANE

TOTALS

MONTHLY 150 200 250 514 442 268 175 200 150 30 27 TOTAL LOTS AVAILABLE 3,129
 CUMULATIVE 350 600 1114 1556 1824 1949 2299 2329
 2,150 2356

* UNSOLD LOTS
 APRIL 1983

773

MARCH AND APRIL = 1 WEEK VISITS
 TO TIE UP LOOSE ENDS

Cost Recovery

It is the intention of the Ministry of Construction (Housing) to undertake a Sales Program. The Ministry is presently reviewing options with regard to suitability and acceptability for the allocation and recoupment of the costs for the improvements made in conjunction with the upgrading program.

In light of the current costs situation and the concern for affordability, the direct participation of the Government of Jamaica will be required to ensure that eligible household benefit. This support has been programmed into the Fiscal Year 1982-83 Budget Request on the part of the Ministry. The support level is to be such as to encompass the entire and full cost of the obligation under the loan. In developing an acceptable recovery program, it is the intention of the Ministry to minimize the long-term obligations to Government and to allow individual households to assume a greater, if not total, share of the actual cost associated with the improvements.

At the present time, the contribution of the Government-owned land is being valued at "zero value", to achieve the lowest possible costs. However, depending on the options selected and feasibility, a nominal factor for this central element may be considered. At no time will any pioneer household be denied tenancy based on any dollar value for government-owned land.

In developing a final recovery plan, every consideration will be given to equalizing the costs among the similar scope projects, while at the same time assuring that an acceptable differential exists for premium sites or for non-income-eligible households. Special consideration will be given to those households who presently occupy improved lands and cannot meet the costs as established under the recovery program. This extra assistance is expected to be limited given the extent of the downward pricing that is projected for the improved areas.

The critical objective of the Ministry is to offer the improved lands at a reasonable cost, determined under the current situation to be in the neighborhood of \$32.00 to \$35.00 per month, or 10% of the median income. Over time, this reasonable cost may vary, although the issue of reasonability and affordability shall remain central to the recovery strategy.

Guidelines for the development of a cost recovery formula:

- GOJ budget input should be minimized, or where necessary, it would be used to optimize performance or be recoverable in the long term
- the cost factors to the individual household should be reasonable in order that it be economically feasible for the targeted population
- the lowest possible costs to the households should be achieved in order to foster the investment and development of the shelter unit
- any subsidy should be applied in the early years when the target population will have the greatest needs

Throughout our presentation, we have assumed that the target income group is earning approximately \$3,915 per annum. A factor of ten percent (10%) of monthly income has been used as the rule-of-thumb in establishing a base rate for land and capital improvements. This would suggest a target rate of some Thirty-Two Dollars and Sixty Cents (\$32.60).

We are projecting an average cost of \$6,000 per lot with terms of twenty-five (25) years at an interest rate of 11% unless otherwise indicated. A straight amortization over the life of the loan would call for a monthly billing of \$58.51.

What follows is a variety of financial options that at times can be applied singularly or in combination with one another to produce an effective reduction on the short-term and/or long-term costs to the households.

Option A: Assumption of Water and Sewer-Related Costs by the National Water Commission:

Out of a total annual loan obligation of J\$2,617,236, approximately \$785,170 can be allocated to water related costs which represent thirty percent (30%) of all project costs. When this sector is allocated to the NWC, a corresponding increase is passed on to all users of the system, resulting in an \$00.80 increase water rates. Sewer represents \$47,102 with a corresponding rate increase of \$2.23 per month. This would translate to a reduction per beneficiary leaving a direct rate of \$32.40. The transfer of obligation to the NWC would not lead to immediate recovery from the beneficiaries and may necessitate further rate increments. This is likely to cause a problem with the collections at the NWC and have a direct bearing on the national treasury in the form of additional outlays to satisfy the shortfall between revenue and costs within the NWC.

A vehicle to transmit the funds from the NWC to either the Ministry of Construction (Housing), or the JMB directly may be necessary; alternatively, this can be handled as an accounting procedure within the Ministry of Finance.

Option B: Use of GOJ Revenue producing schemes to Pay a Portion of the JMB-USAID Guaranty Funds obligations:

Either existing or future projects developed with GOJ funds, which in effect have no external repayment component and can be said to contain a "zero value" with regard to interest and principal, would be given specific dollar value to be used for the repayment of a portion of the JMB-USAID loan. It is important to note the future subsidies that is the difference between the household's ability to pay and the actual costs for upgrading could represent

a substantial governmental outlay. To the extent that this future subsidy is used to create additional improvements, which in turn create new income, this could be used to offset the actual supports required under the loan program. In this way, we not only achieve feasibility but improve the level of performance and the number of households serviced by the Ministry. In the model, future commitments of some \$11,000,000 are used to develop a base of some 2,500 new lots. These will generate an income of \$30.00 per lot and this in turn would directly offset the JMB-USAID projects by some \$20.00 per lot each month.

Option C: Variable Payment Plan

This vehicle permits the scheduling of low initial rates, which can be programmed to increase at a fixed rate or as a percentage over any predetermined time span. The variable payment plan is very much geared to deal with inflationary markets and anticipated income growth situations.

A constant rate of increase (%) permits slightly more liberal initial payments but requires a higher level payment later in the term of the loan than does the constant amount of increase schedule.

Variable payments' chief benefit is that it allows to be made up by the GOJ. In the later years of the loan, the individual household should be able to afford the full costs of the loan.

The short fall in the earlier years would have to be made up by the GOJ. In the later years of the loan, the individual household should be able to afford the full costs of the loan.

Assuming an initial rate of \$35.00 per lot in the first year, GOJ cost would be \$35.36 per lot or \$11,315,392. This support level would be reduced over time and somewhere short of the mid-way during the twenty-five years of the loan period, income should exceed the actual costs of the loan.

Option D: Equity Sharing (For Sales/Or Fee Ownership Options Only)

This formula allows the establishment of any rate value that government is willing to support against the potential capturing of increase earning on the appreciation of the property over time. Using a somewhat different base of \$6,625 as the cost of the average improvement, we have illustrated a 60 - 40% equity position between the household and the Government of Jamaica. In this example, the household would assume the debt service on \$4,000 of the actual cost, paying \$39.21 per month. The GOJ would hold as equity 40% of the value of the improved land, here quoted as \$2,625 (zero land value), this would represent an annual cost to GOJ of some \$1,082,280 (shortfall). Given the equity position, the government is in the position that can either sell its vested interest either to the household or to some other party . . . government can also demand to be bought out at the time of some future sale of the property. Government would not be limited to a fixed rate of return as presented in the cash value of the initial investment but could be guided by the future land value.

The effect on the monthly charges is to reduce them \$39.21. Essentially, government is paying the bill for the household against future profits that would have accrued only to the individual. This concept can be placed on any time frame suitable to the parties and can lead to a renegotiation of the value and debt relationship between the household and the government. The principal factors influencing future governmental returns are TIME, INFLATION and APPRECIATION.

Home Improvement (Subprogram III)

This program was designed to make money available to the Jamaica Cooperative Credit Union League, Ltd. (JCCUL) who will make it available to the credit unions island-wide so as to make loans to their members who fall in the median income bracket for home improvement use only.

Disbursement

1. The credit unions make request to the JCCUL for 85% of the total loan made to their members who are earning J\$6,000 or less, annually.

The request should have the following information:

- (a) name of member
- (b) address of member
- (c) description of improvement
- (d) date of the loan

2. JCCUL would submit this request to the Jamaica Mortgage Bank (JMB) for reimbursement.

3. JMB will make spot-checks so as to be satisfied that the work is in progress. Then it would disburse the money to the JCCUL who will sign a promissory note to repay the Bank.

To date, the bank has disbursed \$4.1 million to nineteen (19) credit unions. Approximately six (6) thousand loans have been made, at an average J\$683 per loan.

DISBURSEMENT TABLE

No. of C.U.	100% Loan Made by C.U.	No. of Loan	85% Reimbursement by JMB	Average Loan
19	\$ 4.832 M	6,000	\$ 4.1 M	\$ 683.00



SECTION OF STANDPIPE LANE PROJECT



4th ANNUAL INTERNATIONAL SHELTER WORKSHOP

**Country Presentation
for
The Republic of Peru
Prepared by
Arq. Lidia Galvez de Snyder**

October, 1982

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I. BRIEF BACKGROUND INFORMATION ABOUT PERU

1. General Geographical Aspects

Perú , with an area of 496,222 square miles (1.3 million square kilometers) is the third largest country in South America (after Brazil and Argentina) and is bordered by Ecuador , Colombia , Brazil , Bolivia and Chile .

The country is vertically divided into three well-defined topographic and climatic regions :

(1) The coastal area , from 16-160 kilometers (10-100 mi) wide is arid or semiarid with mild and even temperatures throughout the year . Much of the industrial , commercial , and agricultural activity is centered in this region despite the scarcity of rain. Over fifty percent of the population lives here and produces more than 70% of the gross national product (GNP) .

(2) The Andes Mountains , about 320 kilometers (200 mi. , wide) , occupy about 27% of Perú's land area . These mountains are the principal barrier to transportation and communication links between the coast and the interior. The rugged eastern slopes culminate in snow-clad Mt. Huascarán - 6,767 meters (22,200 ft.) above sea level. The climate ranges from temperate to frigid , depending on elevation . Rainfall exceeds 254 centimeters (100 in.) annually on the eastern slopes but diminishes southward , causing changes in vegetation . The Andes area contains the major deposits of mineral wealth.

(3) The isolated eastern lowlands , or Montaña , occupy more than half of Perú's total land area. They are a vast uncharted region of hills, forests , and tropical jungle through which numerous rivers wind their way to the Amazon River . The climate in the Montaña is humid and warm with abundant rainfall throughout the year.

This area is sparsely populated and largely undeveloped , although Petroleum deposits, including some commercially significant finds , have been discovered in this area , and further exploration is planned.

Lima's climate is often compared with that of San Francisco . It has no -
extreme temperatures and little daily variation . During winter (May-November),
Lima is covered by low-hanging fog: the atmosphere is usually cold and damp with
very little sunshine. In contrast Chosica , a 45 minute drive inland from Lima , is
at an altitude of 1,000 meters (3,000 ft.) and winter days are sunny and dry.
Lima's summers are warm and sunny almost every day and pleasantly cool at -
night.

2. Population Distribution: Urban/Rural and Regional

During the past 40 years Perú has been transformed from a predominately rural to an eminently urbanized society . According to the 1940 census the urban population represented only 25.8 percent of the total ; in 1961 and 1972 the proportions were 47.4 and 59.5 percent respectively. By 1981, the urban population comprised 65.1 percent.

Summary of Census Data 1940- 1981

Census Year	Total Population		Urban		Rural	
	Thousands	%	Thousands	%	Thousands	%
1940	6208	100	1603	25.8	4605	74.2
1961	9907	100	4698	47.4	5209	52.6
1972	13538	100	8058	59.5	5480	40.5
1981*	17031	100	11086	65.1	5945	34.9

* Preliminary Figures

The urbanizing process has been fastered in great part by a massive internal displacement of people from the Andean Highlands mainly to the urban centers of the Coastal Lowlands but to a much lesser degree also to the Eastern Lowlands . Hence while the population of the Andean Highlands declined from 65 percent of the total in 1940 to only 37 percent in 1980 the population of the Coastal Lowlands increased from 28 to 52 percent and the Eastern Lowlands from 7 to 11 percent.

Regional Distribution of Population in Percentages 1940-1990

	Year				
	1940	1961	1972	1980*	1990*
<u>TOTAL</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Coastal Lowlands	28.0	38.0	47.0	52.0	58.0
Andean Highlands	65.0	53.0	43.0	37.0	30.0
Eastern Lowlands	7.0	9.0	10.0	11.0	12.0

* estimates

3. Population Growth Rates

In terms of inter-censal growth rates Perú peaked at 2.9 percent in the 1961-72 period after having grown at only 2.2 percent during 1940-61 and slowing to 2.6 percent in 1972-81 . Of continuing interest is the spread between urban growth (above the mean) and rural growth (below) as shown by the following table :

Population Growth Rates During Intercensal Periods 1940-1981			
Intercensal Period	Average Annual Growth Rate (Percent per Year)		
	Total	Urban	Rural
1940-61	2.2	3.7	1.2
1961-72	2.9	5.1	0.5
1972-81	2.6	3.6	0.9

The fundament mathematical relationship among the relevant factors in accounting for net population growth can be expressed by the following equation :

$$\text{Net Growth Rate} = \text{Birth Rate} - \text{Death Rate} + \text{Net Migration Rate}$$

The following table provides some specific estimates for these factors - prepared by the Peruvian National Institute of Statistics which emphasize that high rural out migration is the key factor for the high net growth rate of the urban factor. As can be seen in all of the five-year intervals, net natural increase (Birth Rate - Death Rate) is higher in the rural than in the urban areas.

Projections of Basic Demographic Rates 1970-1990

PERIOD	Birth Rate	Death Rate	Net Rural-Urban Migration	Net Growth Rate
<u>Total</u>				
1970-75	4.2	1.4	-	2.8
1975-80	4.0	1.2	-	2.8
1980-85	3.8	1.0	-	2.8
1985-90	3.6	0.9	-	2.7
<u>Urban</u>				
1970-75	3.6	1.0	+ 1.7	4.3
1975-80	3.5	0.9	+ 1.4	4.0
1980-85	3.4	0.8	+ 1.2	3.8
1985-90	3.3	0.8	+ 1.1	3.6
<u>Rural</u>				
1970-75	5.1	1.9	- 2.6	0.6
1975-80	5.0	1.7	- 2.6	0.7
1980-85	4.7	1.5	- 2.6	0.6
1985-90	4.4	1.3	- 2.6	0.5

Pursuing the relevant ^{issues} in further detail it is of interest to compare the implications of a population projection system which varies two major parameters : 1) national growth rate as affected by the rate of fertility decline and 2) alternative rates of the rural population rate of growth or decline . Interestingly this model highlights that decline in the fertility rate impacts most significantly on also reducing the rate of urban population growth .

Nevertheless it must be recognized that under these several sets of assumptions urban population for the year 2000 would be a low of 21.7 million (73.4 %) from projection A: 1 to a high of 26.9 million (84.3%) from projection C-11 as shown in the table "Population , Projections and Rural-Urban Distribution " prepared by the World Bank. (see following pages)

Still another approach to perceiving rates of growth of urban population is in terms of studying individual cities . In the table "Growth Rates of Cities and Urban Size Classes 1910-72 " it can be seen that for 11 of the 13 cities growth was significantly greater between 1961-72 than 1941 - 61 . The 2 exceptions

POPULATION PROJECTIONS AND RURAL-URBAN DISTRIBUTIONS

		1972	I	2000	II
Total:	Size		29,685		31,938
	Growth rate:	14,273	2.7		2.9
A.	Size				
	Rural	6,678	7,897		7,897
	Urban	7,595	21,788		24,041
	Distribution:				
	Rural	46.8	26.6		24.7
	Urban	53.2	73.4		75.5
	Growth rate:				
	1972-2000				
	Rural		0.6		0.6
	Urban		3.8		4.2
B.	Size:				
	Rural	6,678	6,869		6,869
	Urban	7,595	22,816		25,069
	Distribution:				
	Rural	46.8	23.1		21.5
	Urban	53.2	76.9		78.5
	Growth Rate:				
	Rural		0.1		0.1
	Urban		4.0		0.4
C.	Size:				
	Rural	6,678	5,009		5,009
	Urban	7,595	24,676		26,929
	Distribution:				
	Rural	46.8	16.9		15.7
	Urban	53.2	83.1		84.3
	Growth Rate:				
	Rural		-1.0		-1.0
	Urban		4.3		4.6

- NOTES: National
Population Projections: I. Assumes acceleration of fertility decline, with total fertility rate declining from 6.33 in 1970-75 to 3.75 in 1995-2000.
II. Assumes continuation of fall in fertility at same rate as in 1970s.
- Rural
Population Projections: A. Assumes rural growth rate at same rate as the 1961-72 average.
B. Assumes decline in rural growth rate to 0.1% in 1972-2000.
C. Assumes that rural population in year 2000 will be 75% of 1972 level.

SOURCE: World Bank, Peru: Long-Term Development Issues (April 1979), Vol. II, Table 33 and Vol. III, Table 1.19.

GROWTH RATES OF CITIES AND URBAN SIZE CLASSES, 1940-72

	% Per Annum		Share of Urban Population, 1972 (%)
	1940-61	1961-72	
Lima-Callao	5.0	5.8	43.87
Arequipa	3.2	6.2	4.23
Trujillo	5.0	8.5	3.52
Chiclayo	5.4	6.4	2.64
Chimbote	13.4	9.3	2.21
Huancayo	4.2	6.4	1.76
Piura	4.6	5.3	1.76
Cuzco	3.3	3.9	1.68
Iquitos	2.9	6.2	1.55
Ica	4.6	5.3	1.32
Sullana	4.2	4.8	1.16
Pucallpa	12.1	8.3	0.88
Tacna	4.4	7.2	0.82
<hr/>			
Urban population: <u>/a</u>			
2000-19,999	3.3	4.3	22.60
20,000-49,999	3.5	5.4	10.00
50,000-99,999	5.1	6.0	4.19
> 100,000 (excluding Lima)	4.4	6.6	19.35

/a The size class categories refer to the 1972 size of cities.

Source: Oficina Nacional de Estadística y Censo.

(Chimbote and Pucallpa) are urban centers which had very small absolute populations in 1940.

Another interesting aspect of city size growth is that there is a very consistent relationship that "rate of population is a function of city size", or that larger cities tend to grow faster than smaller ones. Hence it can be seen that cities of under 20,000 population in 1972 grew at an average annual rate of only 4.3 percent as opposed to 6.6 percent for those of over 100,000 (excluding Lima). For intermediate sizes the relationship was consistent (20,000-50,000 at 5.4 percent; 50,000 - 100,000 at 6.0 percent).

4. Income Distribution and the Population Economically Active

In general terms about half of the economically active population in Peru is either un-employed or under-employed. As shown in the following table prepared by the Ministry of Labor the trend is for a further deterioration of the situation during the period 1975-85.

Composition of the Economically Active Population In Peru

Employment Status	1975		1980		1985	
	Thousands	Percent	Thousands	Percent	Thousands	Percent
Adequately employed	2,538.8	52.7	2,318.0	41.3	2,949.4	44.8
Under-Employed	2,042.6	42.4	2,901.0	51.7	3,212.2	48.8
Un-Employed	236.1	4.9	393.0	7.0	424.8	6.4
TOTAL	4,817.5	100.0%	5,612.0	100.0%	6,586.4	100.0%

The "economically active population" in Peru is defined to include all persons 15 to 64 years of age who are presently employed or actively seeking employment. The three categories of employment status shown in the table are defined as follows:

Adequately Employed - all persons who work more than 35 hours per week and whose income levels are above the minimum legal salary and also persons who work fewer than 35 hours but whose income is above the legal minimum but

do not choose to work more hours.

Under - Employed - all persons who work more than 35 hours per week and whose income levels are below the minimum legal salary and also persons who work fewer than 35 hours and whose income is below the legal limit and /or who have training or skills which would permit achievement of the minimum level if more hours of work were available.

Un - Employed - all persons that during the period studied were actively in search of employment.

During the interval 1975-85 the economically active population was calculated to average 59 percent of the population from 15 to 64 years old and 31 percent of the total population.

Reliable data on income levels per family in Perú are difficult to obtain for a variety of reasons . One of the principal factors is that much of the rural population lives virtually outside of the cash economy and the calculation of monetary equivalents is not only difficult but may not be really meaningful. In urban areas the poor live mainly within the realm of the informal economy and the quest to obtain honest and accurate estimates of family income represents an enigmatic challenge to social scientists . Sample surveys have been made, however, in eleven of the most important cities of the country . Results are summarized in the table "Distribution of Family Income by Deciles for Principal Cities In Perú , December 1981" . (see following pages)

Distribution of Family Income by Deciles, for Principal Cities in Perú, December 1981

(Current Soles per Month)

Decile	Average	Lima	Arequipa	Chiclayo	Trujillo	Puno	Iquitos	Chimbote	Piura	Cusco	Tacna	Huancayo
1	46,041	47,667	33,717	53,904	41,792	45,133	55,519	53,112	40,133	46,563	59,131	50,409
2	61,683	64,258	46,711	66,224	56,651	63,371	77,967	69,761	51,899	59,427	75,683	62,355
3	74,539	77,758	57,566	76,587	68,328	78,475	95,406	83,540	62,501	71,003	92,557	74,483
4	86,087	89,928	68,093	86,181	78,356	91,382	109,462	96,331	71,225	81,569	106,590	85,421
5	97,921	102,438	79,224	94,890	88,050	103,394	123,483	109,982	79,346	93,521	121,719	97,384
6	110,491	116,086	90,276	103,646	98,194	114,959	136,755	122,752	88,308	106,133	137,352	108,877
7	124,410	131,394	103,323	113,722	110,268	127,709	142,000	136,676	97,822	119,401	155,689	121,408
8	141,285	149,600	117,622	125,884	124,865	142,969	168,726	153,012	109,344	134,065	174,548	135,479
9	163,423	174,039	135,963	140,861	145,224	163,082	192,056	172,375	123,639	152,556	199,743	154,423
10	204,569	218,740	171,067	169,756	180,432	198,478	257,123	209,653	147,330	179,759	237,484	203,478
Average	111,045	117,185	90,359	103,166	99,216	112,895	135,850	120,719	87,155	104,400	136,050	109,372

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II. SHELTER SECTOR CHARACTERISTICS

1. Settlement Patterns

As a result of the powerful shift during the past 40 years from a predominately rural to a highly urbanized population the results of growth, sometimes exceedingly rapid growth, have impacted on practically all towns and cities in Perú. Because of Lima's tremendous political, economic and social importance and its accelerated expansion during this period, perhaps it is best to first grasp the magnitude and relevance of the "primacy" of the capital city. On the basis of census data and estimates of the National Planning Institute the following profile emerges:

LIMA'S POPULATION SHARE 1940 - 90

Year	Population in thousands	Share of Urban Population (%)	Share of Total Population (%)
1940	602	36.0	9.7
1961	1,694	42.6	17.1
1972	3,154	43.9	23.3
1981	4,510	41.2	27.7
1990*		42.4	31.3

* Estimates

The distribution of city sizes is such that the large number of smaller settlements provides the base for a pyramid with many towns of under 2,000 people and very few cities with over 500,000.

The following table gives some idea of the present and projected distribution of towns and cities in Peru by size categories.

Classification of Urban Settlements by Population Size 1980-90

Population Size	Urban Settlements 1980		Urban Settlements 1990	
	Number	%	Number	%
500-2000	1122	70.0	1128	79.4
2000-20,000	254	18.0	227	16.0
20,000-50,000	22	1.5	33	2.3
50,000-500,000	21	1.4	28	1.9
500,000 or more	1	0.1	4	0.4
Total	1420	100.0	1420	100.0

The most important feature of the pyramid is the distinctly disproportionate differences between Metropolitan Lima and the next-ranking cities of Arequipa and Trujillo, where the former is more than 10 times larger than the second and third largest cities.

Perhaps the most significant feature of urban growth in Peruvian cities in recent decades is the mushrooming growth of the "Pueblos Jovenes." It is best not to invent an over-simplified translation for these new urban development years because their origins, age, and present stages of development vary widely.

Different authors have used terms such as "young" town, "squatter" developments and "shanty towns."

The fact remains that this diverse and now extremely important segment of the urbanized zones of Peruvian Towns and cities has been given legal status. First given notoriety in the Lima Metropolitan area, the evolution of "Pueblos Jovenes" has been a conspicuous feature of all medium and large urban centers and in many smaller ones.

Total Population Residing in "Pueblos Jóvenes" in Peru 1961 1981

Census Year	Total Population in Pueblos Jóvenes	Percentage of Total Urban Population in Perú
1961	448.3	9.5
1972	1477.3	18.3
1981	2743.2	24.7

The next three ranking Peruvian cities after Lima , namely Arequipa, Trujillo y Chiclayo each have more than half of their total populations living in "Pueblos Jóvenes"

**Population Residing in "Pueblos Jóvenes" in the four largest cities
in Perú in 1981**

Largest Cities	Total Urban Population	Population in "Pueblos Jóvenes"	Percentage of Total
Lima Metropolitan	4'600.9	117.8	25.5
Arequipa	452.9	257.3	56.8
Trujillo	354.6	181.0	51.1
Chiclayo	265.4	137.3	51.7

At present there are 838 legally recognized "Pueblos Jóvenes" in the country . Of these 78 percent are located in cities of over 50,000 inhabitants.

Distribution of "Pueblos Jóvenes" with Regard to City Size

City Size (Total Population)	Number of "Pueblos Jóvenes"	Percentage Distribution
Cities of over 30,000 inhabitants	654	78
Cities of 20,000 to 50,000 inhabitants	96	12
Cities of under 20,000 inhabitants	88	10
TOTAL	838	100 %

2. Housing Stock

On the basis of preliminary results of the 1981 census it appears that the rate of growth of the National Housing Stock during the 1972 - 1981 period was about 1 percent per year . Given the great initial deficit at the beginning of the period and an annual population in growth of 2.6 percent it can be obviously concluded that Peru lost ground , significantly, in the battle to provide adequate housing for its population.

Annual Rates of Increase in Housing Stock 1961 - 1981

Period	Average Annual Rate of Increase		
	Total	Urban	Rural
1961-1972	3,890	5.6 %	2.0 %
1972-81	1,090	1.7 %	-

The corresponding absolute figures from census sources are shown in the following table :

Number of Housing Units 1961 - 1981

<u>Census Year</u>	<u>Total Housing Units</u>	<u>Urban</u>	<u>Rural</u>
1961	1,986,000	941,000	1,046,000
1972	3,015,000	1,715,000	1,300,000
1981	3,303,000	2,002,000	1,300,000

The severe reduction in rate of new housing construction in urban areas in the face of the more rapid population growth has resulted in a dramatic increase in the number of inhabitants per dwelling unit from 4.72 in 1972 to 5.54 in 1981 , and increase of 17.4 percent.

The following two tables provide a summary of the situation for the last 3 census years .

Relative Distribution of Housing Units 1961 - 1981

(Percent of Total Dwellings)

<u>Census Year</u>	<u>Total Housing Units</u>	<u>Urban</u>	<u>Rural</u>
1961	100	47.3	52.7
1972	100	56.8	43.2
1981	100	60.6	39.4

Average Number of Inhabitants per Housing Unit, 1961-1981

<u>Census Year</u>	<u>All Housing Units</u>	<u>Urban</u>	<u>Rural</u>
1961	5.01	5.02	4.99
1972	4.51	4.72	4.22
1981	5.15	5.54	4.57

A major barrier to the rhythm of housing construction is, of course, the availability of financing. The following table provides a summary of how new housing units were financed in each of the last census years.

Sources of Financing for New Housing Construction 1961 - 1981

<u>Sources of Financing</u>	<u>Number of New Housing Units Constructed (Thousands)</u>		
	<u>1961</u>	<u>1972</u>	<u>1980</u>
All Housing units	76	<u>87</u>	<u>118</u>
With Formal Financing	3	5	8
Self - Financed	53	50	60
Not Specified	20	32	50
Urban Areas	<u>55</u>	<u>69</u>	<u>100</u>
With Formal financing	3	5	8
Self Financial	32	32	42
Not specified	20	32	50
Rural Areas	<u>21</u>	<u>18</u>	<u>18</u>
With Formal Financing	-	-	-
Self-financed	21	18	18

3. Construction Materials

Clearly, a classification of housing type by type of construction materials employed, overlooks many other important aspects that might relate to the adequacy of an individual dwelling.

The following table has considerable significance in indicating the nature of the existing housing stock.

HOUSING STOCK BY TYPE OF MATERIAL		1978
Construction Material	Number	%
Brick	871,266	27.3
Adobe	1454,920	45.3
Stone and Clay	276,756	8.7
Wood	180,926	5.7
Straw matting	81,221	2.5
Bamboo/mud (quinchas)	254,588	8.0
Others	75,176	2.3
TOTAL	3'194,854	100.0

4. Water and Sewerage Systems

As of 1972 about 69 percent of all urban dwelling units had direct access to potable water. Of these, about half had piped water; the other half were served by other kinds of systems. Only about 38 percent of the urban dwellings served by water systems had sewerage systems.

According to the 1981 Census, 68 percent of the urban population had direct access to potable water and in the rural areas only 15 percent. In metropolitan Lima the coverage was about 72 percent. At the same time 57 percent of urban residents nationwide were served by sewerage systems and only 1 percent in rural areas. In metropolitan Lima 64 percent had sewerage service.

Quite clearly, the coverage of water and sewerage services on a national scale is very deficient. Among the major urban centers the degree of coverage varies considerably, with Lima, Chicla and Tacna being among the best and Huacho, Chulucanas and Pucallpa among the worst.

There are many different kinds of constraints and considerations which impact upon the cost and difficulty of providing adequate water and sewerage services. One of these is the continued industrial growth in Lima and other major cities which competes vigorously with domestic and other uses for sanitary services. Similarly, the considerable geographic diversity over the vast expanse of the national territory must contend with extreme conditions of super-abundance of water as opposed to total absence. Similarly, local conditions for establishing sewage treatment systems vary enormously.

5. Housing Demand

In 1972 the quantitative deficit of housing units (shortage) was estimated at 556,000 dwellings and the qualitative deficit (deteriorated units) at 530,000 dwellings, for a total deficit of over 1 million housing units in that year.

By 1980 the shortage and deteriorated totals had risen to 934,000 and 616,000, respectively, for a total deficit of 1,550,000 dwelling units. Hence in less than a decade the shortage had grown by 464,000 units, or 43 percent.

As a consequence of the low level of savings and of purchasing power of the great majority of the national population, the demand for housing is very heavily weighted for access to very modest dwellings within the reach of this majority. Government efforts in attempting to alleviate the deficit have placed maximum dependence upon the economic resources of FONAVI (the National Housing Fund). The results and projections of this governmental involvement during the period 1981-83 is summarized in the following table.

Construction Programs Sponsored by the Government 1981-83

Programs	FONAVI		
	1981 (completed)	1982 (completed or programmed)	1983 (programmed)
1. Single-Family Houses	3,403	5,543	3,483
2. Apartments	1,026	17,021	1,500
3. Lots with Basic Services and Nuclear House	-	14,842	9,568
4. Lots with Basic Services	2	17,945	10,124

OTHER FINANCING

(Peruvian Housing Bank and World Bank)

	1982 (completed or programmed)	1983 (programmed)
1. Lots with Basic Services and Nuclear House	4,724	-
2. Lots with Basic Services	6,341	1,195

6. Land Availability and Tenure

At least until the decade of the 1960's, urban development in Peru was largely and simply a consequence of the activity of private sector subdivision promoters who bought up attractive agricultural land to be improved, subdivided and sold to middle and upper income buyers. In general terms it is accurate to say that there was virtually no effort to promote or develop subdivisions for low income people

In the years immediately preceding 1957, and especially in the outskirts of Lima, the country experienced a new version of urban development. This was in the form of well-organized "squatter invasions" on non-arable lands to provide housing sites for low-income "invaders". These new settlements were dubbed as "barriadas", a term referring disparagingly to these new settlements characterized by improvisation and privation due to the lack of urban services and facilities. Typically these invasions were perpetrated (and continue at the present time) by poor urban dwellers or recently arrived rural migrants who were prepared to escape from the crowding, congestion and inadequacy of life in rented quarters in dingy urban slums in older neighborhoods of existing cities.

Finally in 1961 a new law was enacted (No. 13517) for the specific purpose of the upgrading of the "barriadas", including the provision of electrification and sanitary services, improvement of streets and access roads and the legalization of the "invasion" by giving full legal property titles to the new "owners".

For more than a decade this special but administratively complicated "urbanizing" process impacted as a major force in the urban development of the country. In the early years of the military government (1968-80) the term "barriada" was officially replaced by the currently used term "pueblo joven". In 1976 the government decided

to try to call a halt to the whole business and prohibited any new invasions. In spite of this prohibition, the invasions continued to proliferate and continued to constitute a major form of urban expansion on a national level.

The far-reaching implications of this invasionary urbanizing process can best be grasped by the fact that, as of 1981, the total population resident in the "pueblos juvenes" was 2,743,200 persons representing 462,452 families. This amounts to 16.1 percent of the total national population and 24.7 percent of the urban population in that year.

Nevertheless, it is important to point out that only 13.8 percent of these persons and families have obtained legal titles to their "new properties". Since possession of the legal title is an indispensable condition for securing any kind of institutional financing, this means that 86.2 percent of the families are automatically excluded from access to traditional, legal sources of credit for improving and upgrading their homes.

Recently, complications and delays associated with applying for and securing legal titles have been reduced; nevertheless, the fact remains that there is an enormous volume of applicants yet to be processed. This is a situation similar to that in 1963 when public sector policies became more oriented to programs serving low-income families through the preparation of lots with basic services, with or without the nuclear house, and supervised credits for housing construction as conscious, planned alternatives to the "invasion" process of urban development.

The important constraint to these activities, however, is that the areas of government owned land suitable for being urbanized is in ever-increasing short supply. During the 1970's the government resorted to outright expropriation of land suitable for government sponsored housing projects.

This situation of extreme shortage of suitable sites for such purposes has given rise to the creation of a new model for organizing and facilitating urban development projects. This is a system of publicly sponsored competitive bidding by private promoters who offer suitable pieces of land and acceptable plans for its development as part of a joint venture in which the government provides the financing for housing construction and other improvements.

III. ORGANIZATIONAL STRUCTURE OF THE MINISTRY OF HOUSING

In accordance with the law of Executive Powers of the Government as prescribed by the Constitution of Peru, the Ministry of Housing is responsible for matters regarding adequate housing for the country. The Ministry responds to this charge not only through its resources but also through the Government Owned Corporations and Decentralized Public Agencies that pertain to it. This concern for adequate housing at the national level must take into account the general policies of the government as well as the specific development plans of the various governmental agencies and the different socio-economic levels of the various sectors of the national population.

At the national level the Ministry of Housing is involved with the following areas of responsibility: 1) Urban growth and development, 2) The quality of the environment, and 3) new construction.

They relate to: 1) housing construction, 2) urban infrastructure and 3) complementary services. The involvement of the Ministry in these areas of responsibility includes planning, supervision, coordination, administration, execution, and evaluation.

In order to satisfactorily comply with the goals and objectives of the Ministry and to achieve an efficient level of administration, the Ministry will simultaneously engage in promotion, setting of standards and control.

At the same time the Ministry assigns the actual execution of specific construction and urban development projects to the Government Owned Corporations and Decentralized Public Entities created for their respective purposes.

Following the guidelines of the law of Executive Powers which governs all Ministries and also taking into account its special requirements, the Ministry of Housing has established the positions of Vice-Minister and Inspector General as well as creating the following line functions which are responsible

for each of these divisions (General Directorates):

Urban Development
Construction
Quality of the Environment
National Monuments

In order to provide technical advice and orientation the following offices were established :

Planning
Legal Section
Organization and Management

As essential support units the following offices were established :

Administration
Statistics
Data Processing
Information and Public Relations

Also established were decentralized regional offices of the Ministry -
located in the capital cities of each of the "Departments" (States) of the country .

Of the previously mentioned divisions and offices it is particularly -
relevant to call attention to the responsibilities for Urban Development especially -
with regard to establishing a coherent national policy for the expansion and -
improvement of cities and other urban settlements on a national scale. A major -
concern is for coordination , evaluation of information and implementation of
policy, plans and programs for physical development. With regard to actual
construction, it is essential to set standards and establish procedures relating to
organization , programming and execution for diverse projects including single and

multiple family housing , community and commercial centers and other public buildings . In order to protect and improve the quality of the environment it is necessary to formulate, coordinate and supervise relevant policies and to - promote the development and use of appropriate technologies .

The implementation of these diverse functions and activities on a national level is achieved by the Regional Divisions of the Ministry created in conformity with the administrative decentralization called for in the new Constitution of Peru of 1979 .

The various Government Owned Corporations and the Decentralized Public Agencies which pertain to the Ministry are responsible , respectively for efficient and appropriate participation in the governmental role in the achievement of - adequate housing for the country .

The Government Owned Corporations include :

- ENACE (Empresa Nacional de Edificaciones) The National Construction - Corporation for Housing , Urban Infrastructure and Public Buildings .
- SENAPA (Servicio Nacional de Abastecimiento de Agua Potable y Alcantarillado) The National Service for Water and Sewerage .
- SEDAPAL (Servicio de Abastecimiento de Agua Potable y Alcantarillado de Lima) The Lima Metropolitan Service for Water and Sewerage .
- SEDAPAT (Servicio de Abastecimiento de Agua Potable y Alcantarillado de Trujillo) The Trujillo Metropolitan Service for Water and Sewerage .

The Decentralized Public Agencies include :

- ININVI (Instituto Nacional de Investigación y Normalización de Vivienda) The National Institute for Technological Research and Construction Standards for Housing .
- INADUR (Instituto Nacional de Desarrollo Urbano) The National Institute for Urban Development.

- PATPAL (Patronato del Parque de las Leyendas) Municipal Council for "Las Leyendas " Public Park .
- El Consejo Superior de Licitaciones y Controles de Obras Públicas , The Appeals Board for Public Bidding and Control of Public Works .
- El Consejo Nacional de Tasaciones , The National Council on Real Property Appraisal .
- CREPCO (Consejo de Reajuste de los Precios de la Construcción) The Construction Cost Index Board .
- SENCICO (Servicio Nacional de Capacitación para la Industria de la Construcción) The National Training Service for the Construction Industry

The Government Owned Corporations are subject to the regulations and restrictions specified in the law which specifies the degree of government involvement in empresarial activities (Ley de Actividad Empresarial del Estado).

Accordingly , each of the following Government Owned Corporations has specifically defined functions :

ENACE is the government-owned corporation in charge of defining , planning , obtaining financing , designing , executing and transferring titles for the diverse programs for providing basic urban infrastructure , construction of housing units and the provision of corresponding public services as well as for public buildings. The Corporation is empowered to negotiate and enter into all necessary contracts.

SENAPA is the entity in charge of putting into practice the elements of the Governmental policies at the National level relating to the installation , operation , control and maintenance of the urban water and sewerage systems for the major cities of Perú . The specific responsibilities include planning , programming , financing , setting standards , preparation of projects, the execution of these projects , technical assistance , supervision of operations and evaluation of completed projects for the purposes of establishing and adjusting rate structures.

SEDAPAL, SEDAPAR and SEDAPAT as subsidiaries of SENAPA provide all of the same functions but in operational terms in the cities of Lima , Arequipa and Trujillo , respectively.

Among the Decentralized Public Agencies , ININVI , INADUR and PATPAL are relatively new creations . Their respective functions , specifically in the area of providing professional and technical services to urban and housing development within the country , include :

ININVI is responsible for defining , promoting and executing research activity which emphasizes scientific , technological and socio-economic dimensions of housing , urban infrastructure and services and other government sponsored construction in urban areas . In addition this institute formulates the standards that apply to building design and construction technology as relate to improving procedures and proceses as well as making better use of available building materials ; this is a specific concern for reducing costs , improving quality and diversifying the types of urban construction projects in terms which respond most rationally to national realities .

INADUR is in charge of carrying out and promoting research relating to the planning of urban settlements but with particular concern for seeking out and supporting municipal governments in the formulation and execution of their specific plans , programs and projects for local urban development . In addition, this institute provides support in the evaluation and training of personnel in the field of urban development as well as advising municipal governments in matters related to financing their urban development activities .

PATPAL is specifically concerned with optimizing the cultural impacts on urban life of the "Parque de las Leyendas" (a zoological and archeological park in metropolitan Lima) with emphasis on education , recreation and better use of free time of the urban population.

Other Decentralized Public Agencies which have more specific, restrictive functions in the housing and urban development fields include :

The appeals Board for Public Bidding and Control of Public Works is the court of last resort in resolving disputes among buyers , sellers , contractors and government agencies and also responds to inquiries that favor a prior resolution of such disputes.

The National Council on Real Property Appraisal is in charge of defining the standards and criteria for property taxes and other fees and user charges relating to urban construction and also to propose to the Ministry of Housing for its approval the Code for Real Property Appraisals.

CREPCO is responsible for maintaining and periodically up dating the price indices for construction materials , particularly to facilitate reajustments in budgets for public as well as private construction projects.

SENCICO is responsible for the training of construction workers in the various areas of specialization and levels of expertise required and for the evaluation and certification of construction personnel as well as carrying on continuing research and elaborating special studies in conformity with the requirements and requests of the Ministries of Education and of Labor , respectively.

Taken together these various public corporations and decentralized agencies provide a system of essential support services and functions to foster and encourage more efficient public administration in the areas of housing , construction and urban development.

IV. DEVELOPMENT OF WORKSHOP THEME N° 4 :

The Relationship of Project and Program Design To Individual Household Income Affordability Levels.

1. Target Group Identification

The differentiation and identification of the socio-economic groups actually served by the various governmental housing programs in Perú unfolds as a result of the diverse conditions and limitations imposed upon potential borrowers who are seeking financing to acquire , build , add-to or improve their own homes.

Prior to 1979, the resources for housing finance were derived mainly from the public treasury , the Savings and Loan Associations, The National Housing Bank and The Central Mortgage Bank.

The National Housing Bank (Banco de la Vivienda) was , and continues to be, the receptor institution for the government for external credits from international agencies such as AID , The World Bank and the Inter-American Development Bank. The Housing Bank then functions as the intermediary to extend loans for a variety of housing related uses including new housing programs , the creation of urban infrastructure including water , sewerage and electrification , wholesaling funds for supervisal credits in the "Pueblos Jóvenes" and providing loan resources for the operations of Housing Associations and Cooperatives.

A. Use Of Domestic Financial Resources

The creation of the National Housing Fund (FONAVI) by Decree Law N° 22591 on June 30 , 1979 was an important turning point affecting the availability of financial resources for the construction of housing and the development of urban infrastructure in Perú. The program was received with considerable public enthusiasm as it proposed to

progressively satisfy the tremendous demand for worker's housing and signified a major advance at the national level of a greater availability and possibility of owning your own home.

The income for FONAVI is generated from a mandatory contribution paid by and on the behalf of all workers on payrolls in the country, blue collar and white collar, both public and private sectors.

Independently employed persons can participate voluntarily.

The amount of the contribution to FONAVI is composed of 2 parts, one paid by the worker, the other by the employer. The worker pays one half of one percent of his monthly income which does not exceed 5 minimum monthly salaries. In theory the minimum monthly salary is literally what it says and is re-adjusted upward every 3 months to compensate for domestic inflation. The employees, however, pays 4 percent of the workers monthly income, also on amounts up to 5 minimum monthly salaries. Self employed, voluntary participants pay both shares or 4.5 percent with the same maximum base amount.

In addition there are other sources of income to the FONAVI resources. Construction firms which execute projects financed by FONAVI and the suppliers of goods and services to the contractors pay in 3 percent of the value of the amount contracted or billed, respectively.

Other income is generated from repayments on mortgage loans, interest paid on bank deposits, external credits and gifts or non-repayable grants.

Gross income during the past two years was as follows:

1980	S/.34,594 million soles
1981	S/.74,546 million soles

Estimates for the subsequent years are as follows:

1982	S/ 90,884 million soles
1983	145,650 million soles
1984	222,429 million soles
1985	250,900 million soles

The financial resources of FONAVI are used for the following purposes:

- a. The construction of housing units to be rented or sold to workers who contribute to FONAVI.
- b. The granting of mortgage loans for the construction of what will be the only home owned by the contributing worker on a lot that he owns or for which he has already amortized 75% of the cost.
- c. The granting of mortgage loans for the purchase of what will be the only home owned by the contributing worker but only for homes whose building permit was issued after September 18, 1980.
- d. The granting of mortgage loans for the completion of the construction of only homes owned by a contributing worker on a lot to which he has legal title.

The socio-economic characteristics of the beneficiaries of the above-mentioned uses of FONAVI funds are indicated in the table on the following page where the maximum and minimum payments for mortgage loans of different magnitudes are specified.

Beginning in 1980 the FONAVI income has been assigned exclusively to finance the 1980-85 National Housing Plan with the resources being assigned in the following proportions:

Construction of Housing Projects	58.1%
Subsidized Mortgages to Individuals	24.9%
Capital grants to the "Banco de Materiales"	2.0%
Grants to SENAPA for Sanitary Infrastructure	15.0%
Total	<u>100.0%</u>

The funds of FONAVI are deposited in and administered by the National Housing Bank. The operational details of each of the above-mentioned uses are as follows:

a. FONAVI Construction of Housing Projects

The execution of these programs is in charge of ENACE, The National Construction Corporation of housing, urban infrastructure and public buildings. There is a contractual agreement between ENACE and the National Housing Bank which establishes the technical and administrative norms which are to be adhered to in the awarding of contracts to private construction firms for execution through a system of public bidding procedures which are specified by specific government regulations. The transfer - sale of the dwellings constructed to individual owners is effectuated by means of subsidized mortgages.

b. Subsidized Mortgages to Individuals

As indicated above, part of the revenue generated by FONAVI goes to reinforce the resources of other financial entities which make mortgage loans like the Central Mortgage Bank and the Savings and Loan Associations. The purpose is to make available resources which in fact provide preferential, subsidized interest rates to FONAVI Contributors, especially those with low and medium incomes.

The basic factors determining the differential rates of interest charge are: 1) The area of the dwelling unit to be constructed, 2) The value of the dwelling specified in units of the Minimum Monthly Salary at the time the loan is granted and 3) whether or not the dwelling is in the Lima-Callao Metropolitan Area. A condition applicable to all mortgages is that the dwelling be constructed on a lot no larger than 300 meters.

Area of Dwelling Unit	Maximum Value in Minimum Monthly Salaries	Rate of Interest Charged Lima-Callao Provinces	
65m ²	190	17%	16%
90m ²	240	22%	21%
120m ²	360	27%	26%

c. The "Banco de Materiales "

This institution created in 1980 by Law N° 23220 is a non-profit organization established to help solve the housing problem in Perú through an interesting and unique approach . It's major function is to provide loans to individuals to purchase construction materials in order to build or improve their homes. Beyond the monetary loans the "Banco " provides a series of support and service functions to better facilitate the use of the loan proceeds by the borrower.

The resources made available to the "Banco de Materiales" include the following each year :

- Direct Government Contribution of 1 Billion Soles(US \$ 2.5 million)
- 2 % of the Gross FONAVI Revenues
- Other credits from Domestic or Foreign Sources
- Amortization Payments on Outstanding Loans
- Grants or Donations from any Source .

The individual loans extended by the "Banco de Materiales" have the following characteristics :

- Maximum Amount : 30 Minimum monthly salaries *
- Repayment Period : 2 1/2 years
- Rate of Interest Charged : 15 % and 16 %
- Validated Evidence that the Borrowers Monthly Income

Does not exceed 6 minimum monthly salaries Evidence that the Borrower has legal title to the lot where the construction materials will be used.

* As of September 1982 the Minimum Monthly Salary was the equivalent of about US \$ 75; therefore, 30 Minimum Monthly Salaries would be equivalent to about US \$ 2,250.

B. Use of External Resources

Significant use is made of external credits obtained by the National Housing Bank from institutions such as AID and The World Bank. The utilization of these funds, usually augmented in some measure by public, counterpart or matching funds is normally governed by specific terms laid down in the loan agreement. Almost always this includes a clear statement of the conditions for making loans and repayment procedures as they ultimately impact on the final beneficiary.

Through the use of such kinds of resources, financial support has been extended to closed groups (Cooperatives, Housing Associations and "Pueblos Jovenes") as well as to individual borrowers. It is important to note that since the access to FONAVI constructed housing is done by drawings among FONAVI contributors the closed groups are excluded as such even though individual members may be FONAVI contributors.

In conclusion, here, it can be seen that it is a matter of the incidence of the conditions and limitations in qualifying for available financing for housing purposes that defines the socio-economic groups which are served.

2. Special Design Requests

If the governmental housing programs are really going to resolve the shelter needs of medium and low income families it is extremely important that there are not excessive pressures with respect to the debit bearing capacities of these families so as not to distort family harmony and life patterns.

Because in Peru the rates of increase in construction costs in recent years have advanced at a pace substantially ahead of the general cost of living index, the ease and possibility of access to newly constructed housing is successively lessened for low and middle income families.

Because of this emergent situation the measured response of governmental housing officials has been to direct greater attention and priority to programs which provide lots with basic services and in many cases with a house nucleus already constructed. Clearly this approach to the solution offers the opportunity for the families to continue finishing and/or expanding their basic dwelling unit with or without additional loans as the individual family circumstances may dictate.

In a conscious effort to rationally relate the acquisitive power of the families to a reasonable accessibility to their own dwellings through the various governmental housing programs the average lot sizes and areas of actual construction have declined considerably as shown by the following table:

	1963-1968	1982
Minimum Lot Size for Single Family Dwelling	160m ²	90m ²
Area of Construction for House Nucleus	45m ²	20-25m ²
Total Area of Construction for Single Family Dwelling	80-140m ²	62-105m ²

It must be recognized, nevertheless, that despite these rather drastic reductions in minimum lot sizes and areas of construction, the ongoing housing programs are not providing viable housing solutions to the great bulk of persons in the lowest socio-economic levels, which is a high priority objective. These significant reductions in areas, reduction to a minimum of area for streets and reduced quality in the finished construction, it may well be that there will be less demand for the products with these new standards as potential clients consider the economic and other attractions of reverting to the "invasionary" solution.

Also, with these reduced dimensions, it may result that we cannot provide an adequate basic dwelling for the social groups that we want to serve. If we begin with the premise that the provision of lots with basic services is a meaningful, planned alternative to the "invasions" and "barriadas" of years ago, it is probably essential to project opportunities for our future clients to achieve a level of relative comfort which is at least comparable to that of the residents of the present "pueblos jovenes", taking into account that the rural origins and ways of life of these people may make excessively confined and congested urban life unsupportable and unacceptable with the potential for social breakdown.

Reflecting upon these kinds of possibilities leads us to consider the necessity of attempting to achieve a greater compatibility between the family home function of the dwelling unit and the productive or income generating

function. If in fact these two aspects can be identified together to form a joint object the assignment of larger, more viable lot sizes could be justified.

Clearly this is an area worthy of well-designed further research. We must take into account in Peru that typically in the family units of the poorest socio-economic levels, both the husband and the wife must contribute materially to the family well-being and that these traits are stronger and more persevering among the populace of rural origins. The opportunity, perhaps, should be made available for the wife to engage in productive, income-producing activities on a part-time basis complementing the traditional household and family care tasks.

As a consequence the case is here made for conceptualizing and designing public housing projects not exclusively from the point of view of providing shelter, but also for fostering more viable economic development of the family unit.

At the same time it is well to reflect upon the question of how these low income families could overcome their financial limitations in order to gain access to larger lots which would permit this double function.

We believe that the limitations to access resulting from ever-increasing costs are the result in great part to deficiencies in the criteria and standards for subdivision development and the lack of appropriate intermediate technologies for the construction of the house nucleus. At the same time, there are excessive and probably unnecessary delays in the installation of water and sewerage systems. It was in response to this very severe problem that the decision was made to allocate 15 percent of the gross FONAVI revenues to SEDAPA on a nonrepayable basis in order to accelerate the construction of new sanitary infrastructure.

3. Problems with Design/Building Standards

The persistence of high levels of inflation and the resulting impact on construction costs in Peru has thrown into high relief the inappropriateness of present codes and standards for subdivision development and building construction. Specifically, the requirements perhaps are not only beyond our economic capacities but also make demands which are not meaningful in terms of our real needs.

Examples of probable excesses as specified in the building codes include cross sections and dimensions of streets and roads as well as the technical standards for surfacing, curbing and sidewalks; the cross-sections and other features relating to the feeders, trunk-lines and connections for water and sewerage systems; the provisions for putting all cables for public street lighting underground; the limits on the minimum size of lots permitted and the restrictions on percentages of lots which can be built upon.

With regard to construction systems and construction materials, in addition to the almost universal use of traditional construction systems especially of conventional foundations, of traditional roof systems, of brick walls, there are many others whose costs and structural characteristics strain the acquisitive power of low income families and exceed the real security requirements for a basic dwelling unit for a typical poor family in Peru.

In the search for lower cost solutions, it is not sufficient to only look for a more rational use of space and to reduce the areas to be constructed. Equally, perhaps even more important in some cases, are dramatic improvements in the construction systems and in the selection and use of building materials.

There are specific responsibilities for the design and execution of appropriate kinds of related research in these areas charged to the newly created research institutions of the housing sector. In the specific case of ININVI (The National Institute for Research and Construction Standards for Housing)

studies are now under way, in coordination with INADUR (The National Institute for Urban Development) to simplify and reduce certain standards for subdivision development and related infrastructure and to find less costly construction systems for nuclear houses specifically suited to the environmental conditions on the Peruvian desert coast.

ININVI is also responsible, on a continuing basis, for revising and updating the National Construction Codes with respect to specific building standards and practices in order that they can be appropriately replaced with new technical standards. This process includes the preparation and elaboration of proposals which are subject to discussion and comment by institutions and experienced professionals in the public as well as in the private sectors.

WORKSHOP THEME PAPER

SETTLEMENT UP-GRADING
PROGRAMS AS AN ALTERNATIVE TO
SLUM CLEARANCE

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01. INTRODUCTION

1.1. SLUMS AND SLUM GARDENS

1.1.1. The slum gardens came into existence during the first half of the century when private investors and corporations built cheap single story row houses, often built back to back with narrow lanes in between the front sides. These gardens are located in the core of the city. Amenities are few and often in a poor condition.

1.1.2. These amenities are shared by the inhabitants of each single garden. Maintenance has been poor, maybe partly due to the fact that from 1941 onwards, different laws protecting the tenants limited the owner's profits.

1.1.3. In 1973, the then Government put a Ceiling to house ownership and most of these gardens became vested with the Government. About 13,000 (76%) have been transferred to the owners or vested with the government under the Ceiling on Housing Property Law of 1973.

1.2. SLUM HOUSES

1.2.1. There are old residential buildings (Slum-houses) in former residential areas, later turned into stores and apartments for low-income workers. They are subdivided into small units

inadequately maintained and largely deprived of basic sanitary facilities.

1.2.2. Both in the case of slum tenements and slum houses the dwellers have some sort of tenarial status -- owners, tenants, subtenants, etc.

1.3. SHANTIES

1.3.1. In terms of land ownership, 65% of the shanties are on government land and about 40% in annually floodable conditions such as low-lying marshes, canal banks, etc.

1.3.2. Shanties have come up mainly in the beginning of the post-independence period. Most of them over 25 years old, because when the rate of urbanization in Colombo decreased, their growth slowed down and was partly diverted to a larger area around Colombo. Shanties can be found all over the City, mainly on public land. Most of them are wooden huts, with pointed roofs, sometimes covered with rooftiles, more often with cadjan (woven cocomut leaves) or corrugated iron or asbestos sheets. The shanties are dispersed over approximately 1,000 clusters, most of them very small.

In the case of shanties, amenities are either completely lacking or very scanty.

An additional problem is that many of the shanties (an estimated 37%) are located in marshy or flood affected areas.

1.4. SOCIO-ECONOMIC CHARACTERISTICS

- 1.4.1. Majority of the slum dwellers are engaged in casual jobs and are self employed with no fixed income. A large percentage of the shanty dwellers are engaged in the agricultural activities in and around the marshy lands.
- 1.4.2. High rates of unemployment and underemployment, and a proportionately greater incidence of malnutrition and disease than other communities are the main characteristics of slum/shanty dwellers.
- 1.4.3. Most of the expenditure of the slum/shanty dwellers go into the food consumption depriving the families of any improvement in their houses and environments.
- 1.4.4. Surveys indicate that a high percentage (approximately 75%) of the shanty dwellers holds casual, temporary or self-employed jobs than the slum dwellers (approximately 55%). The few figures available, as quoted by Rodell, suggest that the incomes of slum dwellers are, as an average, slightly higher than those of the shanty dwellers. A few figures, obtained in a slum

and shanty respectively, may give an impression.

TABLE - 1

	<u>MED</u>	<u>0-100</u>	<u>101-200</u>	<u>201-300</u>	<u>301-400</u>	<u>401-500</u>	<u>500-+</u>
SLUM	230	18.3	44.4	23.7	14.5	6.9	12.2
SHANTY	220	21.1	36.0	29.4	8.3	2.0	3.3

(FIGURES IN RS. AND % RESPECTIVELY; QUOTED BY RODELL)

From above figures, it is clear that very little can be spent on commuting and that living close to places of employment is essential.

1.5. THE MAGNITUDE OF THE PROBLEM

1.5.1. A field enumeration carried out by the Colombo Master Plan Project and later by its successor, The Urban Development Authority revealed the number and distribution of the slums and shanties in the city of Colombo.

TABLE - 2

1.5.2. Slums and Shanties in the City of Colombo

<u>TYPE</u>	<u>UNITS</u>	<u>FAMILIES</u>	<u>POPULATION</u>
Slums	17253	23137	138,882
Shanties	<u>15951</u>	<u>19608</u>	<u>117,648</u>
Total	33204	42745	256,470
	=====	=====	=====

Source

Ministry of Local Government Housing and Construction - "Policy Paper Slum & Shanty Upgrading in Colombo Municipal Council" - 1979.

1.5.3. The total population of the Colombo Municipal Council is 580,000. The number of Slums and Shanties form about 45% of the city population.

1.5.4. It is estimated that another 250,000 live under same conditions in other districts, towns in Sri Lanka.

1.5.5. The total picture of low-income settlements in relation to the other cities in South-Asian Region is not alarmingly strange; but in the context of Sri Lanka, it is high.

2.0 SLUM/SHANTY CLEARANCE AND UP-GRADING

2.1. Until few years back, approaches to housing continued to be replacement oriented. The conditions in slums and shanties, both socio-economic and physical, were deemed fit for clearance.

In Slum/Shanty clearance, the housing stock is not increased. Investment in direct construction is prohibitively expensive. People cannot economically afford to pay. In most cases, the people are socially not ready to accept these improved standards.

Even if the Government subsidize heavily, the people are not prepared to accept these standards. They sublet the houses and build another shanty. Net result, the houses meant for the poor goes to the rich at a subsidized

rate. There is no increase in housing stock except an increase in a Shanty.

At existing prices, the cost of a direct construction unit would be around Rs.300,000/- compared with upgrading project, which could be implemented for Rs. 10,000/- - Rs. 15,000/-/

- 2.2. Thus a slum/shanty upgrading program will provide 20 times the number of improved dwelling units than new flats under a direct construction scheme.

As indicated on a Policy paper for Slum/Shanty improvement prepared by the Ministry of Local Government, Housing and Construction, consideration of how government could reasonably expect to recover any capital budget allocation reinforces the case for an upgrading scheme.

As interpolated data from Table - 3 demonstrate, giving the existing distribution of incomes in Colombo, only those earning Rs. 4,000/month and spending Rs. 400/month on housing (i.e., 2 percent of the population) could afford this. Even with a two-thirds government subsidy less than 20 percent of the households could pay the Rs. 140/month required. In short, even with massive government subsidies, none of the urban poor population could repay as little as one-third of the cost involved in a direct construction program.

TABLE - 3

ABILITY TO PAY FOR HOUSING - COLOMBO M.C.

Monthly Expenditure Rs.	% of Household	Average Monthly Exp, on housing Rs.	*1- Affordable Capital Sum (Rs) (Repayment period, 30 years)		
			Interest at 9%, No subsidy *2	Interest at 5% 1/3 subsidy *2	Interest at 0% 2/3 subsidy *2
0 - 199	1.7	11	1,300	2000	4000
200 - 399	11.4	16	1,900	2900	5800
400 - 599	22.0	24	2,900	4300	8600
600 - 799	16.6	37	4,400	6700	13300
800 - 999	15.2	45	5,400	8100	16280
1000 +	33.1	177	21,200	32000	64000

*1 - Calculated by translating the present monthly expenditures on housing into an equivalent capital sum - On varying repayment terms.

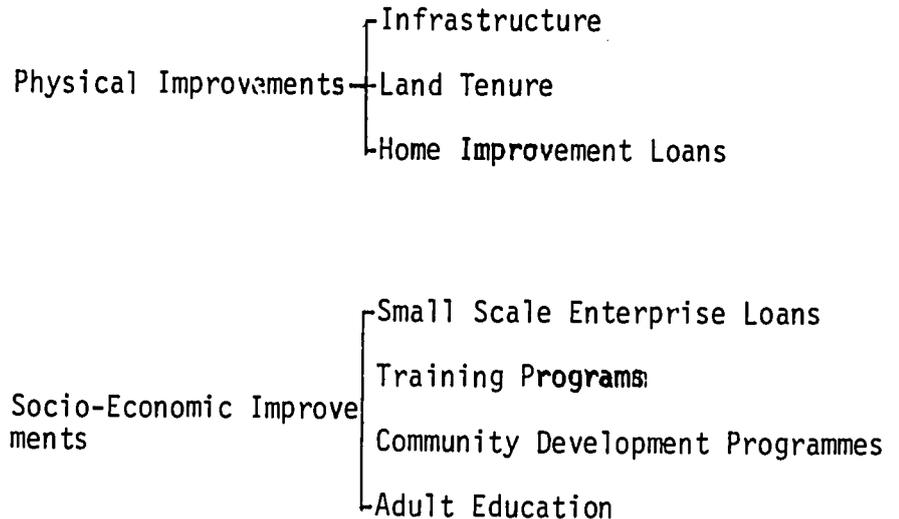
*2 - By comparison with repayments at 9% over 30 years.

Note- The data in columns 1 to 3 are from the "Report on the Urban Family Budget Survey 1977", Department of Census and Statistics.

Source - Policy Paper on Slum & Shanty Upgrading in Colombo Municipal Council
- Ministry of Local Govt., Housing & Construction,
Urban Development Authority, 1979 -

3.0. AGENCY APPROACH TO SLUM/SHANTY UPGRADING

3.1. A comprehensive agency approach is required to carry out slum/shanty upgrading program. The main activities of this program, could be categorized as follows:



3.2. The Urban Development Authority established on 1 October, 1978, under the Ministry of Local Government Housing and Construction is a National Authority. One of the main activities of this Authority is the formulation and execution of Slum and Shanty upgrading programs. The scope of this program is as follows:

- Provision of infrastructure and services.
- Regularisation of terms and granting of leasehold rights.
- Regularisation of the settlements layout to create useful plot sizes and to facilitate self-help housing.

- Sponsoring a loan scheme to provide for housing improvements.
- Socio-economic programs and community participation.

- 3.3. The program is annually allocated Rs. 32.0 million out of a total of Rs. 1,000.0 million approximately under the National Budget for Housing Development. The upgrading program undertaken by the Urban Development Authority aims to improve the living conditions of people living in slums and squatter areas within the capital city of Colombo and other major towns. The scope of the projects range from simple provision of common amenities and maintaining hygienic environment to comprehensive community development. A number of action projects have already been identified and some of them are in various stages of implementation.
- 3.4. Several agencies both governmental and non-governmental are assisting the Urban Development Authority in attending to several types of deficiencies that plague the low-income communities. Vocational training for women, employment, generation for youth, family health projects and self-help improvements to houses are some of them.
- 3.5. The Governmental Agencies are:
- National Housing Development Authority

- Common Amenities Board
- Local Authorities
- Women's Bureau

- 3.6. The Non-Governmental Organizations are United States Save the Children Federation, Redd Barna (Norwegian Save the Children Federation) and UNICEF.
- 3.7. These organizations have undertaken specific settlements for upgrading but with larger proportion reconstructed through self-help in consultation with the Urban Development Authority and assistance is given in the form of sorting out land issues including acquisition, preparation of layout plans, coordinating with other agencies and technical guidance.
- 3.8. Here the non-governmental organizations are able to comprehensively deal with the problem of the settlements as an integrated community development project, bringing in the community to greater degree of participation.
- 3.9. Moreover, their liberties in financial and administrative procedures remain a great advantage to deal with these critical problem areas - cutting through bureaucratic delay. They are also useful laboratories, for example, the recent draft formulation of a loan scheme for low income households intending to improve or build their shelter

is an outcome of the success achieved in the demonstration projects at Kirillapone and Aluthmawatha - executed by the US Save the Children and Redd-Barna, respectively. The efforts of collaboration are now being extended to further project areas where the capacity of the non-governmental organizations will enable greater involvement of target groups.

4.0. INFRASTRUCTURE IMPROVEMENT

- 4.1. One of the major functions of the slum and shanty upgrading program of the government is the provision of infrastructure facilities and amenities. This is carried out by the public agencies with the assistance of the non-governmental agencies.
- 4.2. Provision of tarred roads and access paths, surface drainage, water taps, bathrooms, bathing wells, toilets, street lights, garbage containers and community centers are included in the programme.
- 4.3. Maintenance of these facilities is carried out mainly through local authorities and Common Amenities Board. This direct approach has become a critical issue due to high cost.
- 4.4. A new approach has been developed with the community organizations in the form of a maintenance community.
 - 4.4.1. The members of this community (society) are from the settlement-who select their

office-bearers.

4.4.2. A monthly membership fee is collected and deposited in a local bank and for daily maintenance, necessary laborers are employed.

4.4.3. These laborers are paid from money collected monthly from the dwellers.

5.0. SECURE LAND TENURE

5.1. In Slums tenement gardens, many occupants have recently been given ownership of their dwellings. These new owners now have strong incentives to maintain and improve their housing in accordance with government's desires. Secure tenure is essential if reasonable low cost housing improvement on a self-help basis is to occur.

5.2. The key to gaining effective participation of low- and middle-income groups in housing development is the provision of secure tenure.

5.3. The question of what form of tenure that should be given and for what period has to be considered. The following considerations have been forwarded by a subcommittee who prepared a policy paper for the Ministry of Local Government Housing and Construction, on slum and shanty upgrading in Colombo Municipal Council.

5.3.1. The establishment of a long-term tenure is a pre-condition for the success of many

aspects of a permanent upgrading scheme with socio-economic development. In general, there will be little commitment to either further incremental improvements (spending one's own funds) or community development unless occupants own their houses and have security of tenure.

- 5.3.2. If loans are provided, the collateral for the loan should have a life exceeding the repayment due.
- 5.3.3. Any substantial charge for such land levied on occupants will create economic hardships.
- 5.3.4. If the householder does not have free hold tenure, he assumes, rightly or wrongly, that the agency renting the property has responsibility for its maintenance.
- 5.3.5. If freehold is guaranteed and, at a later date, the government wishes to acquire the land, it is required by law to pay the full current market value as compensation.
- 5.3.6. The National Housing Development Authority or the Urban Development Authority will have sufficient powers to acquire all privately owned land on which there are slums or shanties.
- 5.3.7. Foreign donor agencies often require that the target group should receive certificates of land ownership and be given security of land tenure.

5.3.8. The issue of landlordism must be sorted out. Government funds and programs should not be extended to those who rent out their houses to tenants. Owner occupancy must be the basis of qualifying for any upgrading cum socio-economic scheme.

5.4. The following proposal has been put forward by the same committee.

5.4.1. Existing crown land which contains slums and shanties approved for permanent up-grading should be vested in owner occupants either as lease hold or free hold. If necessary, a minimum charge can be levied. Private land should be acquired and given over to owner-occupants on the same basis. The numerous legal complexities regarding the granting of land at less than assessed value requires further investigation and clarification.

5.4.2. A resolution of these complexities should determine the choice between lease hold and free hold as the appropriate means to assure long-term tenurial rights, whatever form of tenure chosen must make repayment possible and likely and assure house holders maximum committment to up-grading.

5.5. Where temporary up-grading is to occur, no long-

term leasehold or freehold should be granted. The existing "de facto" status should be allowed to continue until the land is acquired. Compensation should be paid for improvements undertaken in the interim.

- 5.6. In March, 1981, the Government of Sri Lanka has initiated action to make granting some form of security of tenure to the beneficiaries in as many shanty and slum settlements as possible. The approval of the Cabinet of Ministers of the Government of Sri Lanka was therefore a major step in granting security of tenure to squatters.

To quote from the Cabinet Memorandum:

"After careful consideration of possibilities of alternative use and other planning implications it has been decided that a large number of the existing communities should be reclaimed. In the following project areas which are on Government or private land, it is proposed that the shanty dwellers are given leasehold rights as an incentive and security for house improvement. In the case of private land, necessary acquisition procedures will be followed. The leasehold rights will be offered for a period of forty (40) years with conditions against transfer and sale".

Source

Cabinet Memorandum: March, 1981.

6.0. HOME IMPROVEMENT LOANS

- 6.1. Home improvement loans were given by the National Housing Department and Commercial Banks which required securities and guarantees. Therefore, these systems were not in favour of slums and shanty improvements.
- 6.2. At present, there is no system evolved where Government agencies provide for home improvement loans in slum and shanties.
- 6.3. As a pilot project, the Non-Governmental Organization called Redd Barna has arranged home improvement loans in collaboration with a Commercial Bank (People's Bank) to improve a slum settlement in Colombo.
- 6.4. The Redd Barna deposits funds in the Bank and on the security of the land allotments given to the settlers, the Bank in turn provides loans at a very low rate of interest.
- 6.5. On the progress made up to now, this system has been identified as replicable. The loan is recoverable over a period of thirty (30) years on monthly installments at 3% interest.
- 6.6. The home improvements have to be approved by the Urban Development Authority and the technical know-how is provided by the Non-governmental organization - Redd Barna.

6.7. The release of the loan installments is supervised by the Redd Barna.

7.0. SMALL SCALE ENTERPRISE LOANS

7.1. This type of loans were not available in Sri Lanka until recently.

7.2. A pilot project for shanty improvement has been commenced by US Save the Children Federation, in collaboration with the Urban Development Authority.

7.3. In this project, the dwellers produce building materials such as sinwaram blocks and asbestos sheets for which the US Save the Children Federation pays labour charges.

7.4. A part of the payment made is deducted and deposited in their savings accounts in the Bank.

7.5. After accruing a substantial amount of savings in the Bank, a "matching loan" is provided to the dweller by the Bank for home improvement.

7.6. During the period of building material productions vocational training programs in masonry and carpentry are organized to enable them to acquire skills to build their own houses on self-help basis.

RESULTS OUTLINED THROUGH SLUM UPGRADING PROGRAM

01. Slum up-grading is preferable to slum clearance due to the following reasons:

- Low cost strategy when compared with new constructions involved in slum/shanty clearance.

- - Under upgrading programs, the same number of families can be housed, whereas in slum clearance approach, due to the implications in standards plus finance, a lesser number is provided with housing units.
 - People cannot afford to pay even if subsidised heavily. People are not prepared to accept these standards. Hence they sublet and build another shanty. The net result is houses meant for the poor goes to the rich at a subsidized rate. No increase in the housing stock except increase in a shanty.
02. Maintenance of common amenities provided through an up-grading program will have to be carried out by community participation by forming welfare societies of the settlements. Thus the reduction of burdens on the Government agencies.
 03. Giving of tenurial rights to encourage home improvements.
 04. Environmental improvements as a result of the infrastructure and amenities provided.
 05. Non-Governmental Organizations participation has considerably reduced the constraints on the government agencies. Non-governmental organizations are able to comprehensively deal with the problems of the settlements as an integrated community development project.
 06. Up-grading concept provides a low cost strategy affordable by low income communities.

07. Up-grading has been a successful approach to achieve a qualitative improvement on the existing Urban housing stock.
08. Socio-Economic development in the areas of domestic savings, raising of income levels, training in skills, improvement in nutrition, health and education, leadership training, adult education, etc., which leads to a considerable improvement in the slum and shanty communities.

COUNTRY PAPER - SRI LANKA

1.0 INTRODUCTION

- 1.1 Sri Lanka is an Island in the Indian Ocean, it was known to the ancient Greeks as "TAPROBANE" and to the Arabs as "ZEYLAN" and to the Western world as "CEYLON".
- 1.2 There are several ethnic groups of people in the country, namely Sinhala, Sri Lanka Tamil, Indian Tamil, Burgher, Moors and others. The Sinhala people predominate and form over 75% of the population while 12.6% are Sri Lanka Tamils, 5.6% Indian Tamils, 7.1% Sri Lanka Moors, and 0.5% others.^{1/} By itself Sri Lanka is a plural society, multi-ethnic, multi-religious, multi-lingual, multi-cultural and multi-political.
- 1.3 The Sri Lankans are the proud inheritors of a very ancient civilization. During ancient times, Sri Lanka was one of the centers of East-West trade and the Sinhalese Kings maintained Ambassadors in Roman countries. During this period there flourished a highly developed civilization which led to unsurpassed cultural development.

^{1/}Census of population and Housing in Sri Lanka - 1981.

- 1.4 The people of Sri Lanka are predominantly Buddhist and the ancient monuments which are scattered throughout the country bear testimony to the achievements of their forefathers.
- 1.5 After the 15th Century the country was subjugated by Western colonial powers, first the Portuguese, then the Dutch, and finally the British.
- 1.6 In 1948 the country gained Independence from the British and ever since it has followed a system of Parliamentary Democracy in Government.

2.0 GEOGRAPHICAL FEATURES

- 2.1 Sri Lanka is a tropical Asian Island situated eighteen miles to the southeast of the southern extremity of India.
- 2.2 The Island is 435 kilometers (272 miles) long, and at its widest point measures 224 kilometers (140 miles across and covers an area of some 65,610 Sq. kilometers (25,332 Sq. miles) which is about half the size of New-Foundland.^{2/}

^{2/}Census of population and Housing in Sri Lanka - 1981.

- 2.3 The relief of the Island comprises a mountainous area over the Central part, which in turn is surrounded by an up-land belt while the coastal plain occupies the rest of the Island.
- 2.4 This tropical Island rises to about 2,600 meters (The highest elevation being 8,292 feet) at the center of the country.
- 2.5 Abundant moisture and a steady tropical temperature in the highlands have fostered Sri Lanka's agricultural development which has been the foundation of her economy in modern times. In three-quarters of the Island, including the northern plains, the combination of winds and rain has been less benevolent. This region is often called the "DRY ZONE" and the balance called the "WET ZONE".

3.0 POPULATION

- 3.1 According to the census of population and Housing Sri-Lanka (1981) the total population was 14.85 millions. (14,850,001)
- 3.2 The Urban population of Sri Lanka is only about one fifth (1/5) while the majority is Rural. (78.8%)

POPULATION BY URBAN AND RURAL SECTOR									
NUMBER' 000					PERCENTAGE %				
	<u>1946</u>	<u>1953</u>	<u>1963</u>	<u>1971</u>	<u>1981</u>	<u>1946</u>	<u>1953</u>	<u>1971</u>	<u>1981</u>
URBAN	1023.0	1239.1	2016.3	2848.1	3195.0	15.37	15.30	19.05	21.51
RURAL	<u>5634.3</u>	<u>6858.7</u>	<u>8565.8</u>	<u>9841.8</u>	<u>11655.0</u>	<u>84.63</u>	<u>84.70</u>	<u>80.95</u>	<u>78.44</u>
	6657.3	8097.8	10582.1	2689.9	14850.0	100	100	100	100
	=====	=====	=====	=====	=====	=====	=====	=====	=====

4.0 NATIONAL POPULATION GROWTH RATE

4.1 The average annual growth rate of the population is 1.7%.

4.2 The rate of population growth in Sri Lanka is currently quite low when compared with the past experience.

POPULATION GROWTH RATE

Year	Total	Average annual rate of growth	Density for Sq. kilometers
1946	6657	2.7	103
1953	8098	3.1	125
1963	10582	2.7	164
1971	12690	2.5	196
1981	14850	1.7	232

4.3 The mortality rates have shown a steep drop in the past few decades. Sri Lanka's crude birth rate has declined consistently. The net result of this was the drop in the rate of natural population increase in Sri Lanka.'

Year	Crude Birth rate per 1000	Crude death rate per 1000	Natural increase per 1000	Net Migration per 1000	Growth of population
1946	38.4	20.3	18.1	8.5	2.7
1953	39.4	10.9	29.5	1.6	3.1
1963	34.6	8.6	26.0	0.6	2.7
1964	33.3	8.7	24.6	0.6	2.4
1965	33.2	8.2	25.0	0.5	2.5
1966	32.2	8.3	24.0	0.5	2.4
1967	31.6	7.5	24.1	0.6	2.4
1968	32.1	8.1	24.6	0.7	2.3

5.0 INCOME DISTRIBUTION

Income distribution of Sri Lanka by receiving units 1973

Income Groups (Rs.)	% of Units	% total income received
below - 100	8.3	1.7
100 - 200	35.3	13.7
200 - 400	37.2	41.3
400 - 600	11.4	19.7
600 - 800	4.3	8.6
800 - 1,000	1.7	4.7
1,000 and over	1.8	10.4

Source: Consumer Finance Survey, 1973.
Central Bank of Ceylon.

The Consumer Finance Survey also shows how the income is distributed in Sri Lanka as a percentage of total income received by each tenth of income receivers. Results of each surveys done in 1953, 1963 and 1973 shows that percentage of income received by highest tenth has been reduced from 42.49% of the total income in 1953 to 29.98% in 1973. However, during the same period the lowest tenth has increased from 1.57% in 1953 to only 1.80% in 1973. From table 17 it could be seen that, it is the middle class that has gained most from the redistribution policies of various Government during this period.

Income distribution of Sri Lanka. Percentage of total income received by each tenth of income receivers.

Decile	Percentage of total income received		
	1953	1963	1973
Highest Tenth	42.49	39.24	29.98
Second Tenth	14.16	16.01	15.91
Third Tenth	10.39	11.46	12.65
Fourth Tenth	7.93	8.98	10.56
Fifth Tenth	6.31	6.82	8.75
Sixth Tenth	5.71	5.55	7.10
Seventh Tenth	4.37	4.57	5.70
Eight Tenth	3.56	3.56	4.38
Ninth Tenth	3.56	2.70	3.17
Lowest Tenth	1.51	1.17	1.80

Source: Consumer Finance Survey, 1973.
Central Bank of Ceylon.

PROJECTED LEVEL AND DISTRIBUTION OF INCOME

Rupees/Month

<u>Urban</u>	<u>%</u>	<u>Rural</u>
000 - 346	10%	000 - 240
347 - 482	20%	241 - 346
483 - 696	30%	347 - 482
697 - 909	40%	483 - 697
910 - 1177	50%	698 - 760
1178 - 1391	60%	761 - 1017
1392 - 1605	70%	1018 - 1177
1606 - 2033	80%	1178 - 1605
2034 - 3103	90%	1606 - 2354

SOURCE: Based on preliminary data for the 1978-79 Consumer Finance Survey coordinated by the Central Bank of Ceylon. Projection prepared by USAID team and reviewed by officials of the Central Bank.

PART II

SHELTOR SECTOR CHARACTERISTICS

6.0 SETTLEMENT PATTERNS

6.1 The pattern of human settlements in Sri Lanka could be categorised into three major sectors.

- (a) Rural Housing
- (b) Urban Housing
- (c) Estate Housing

SETTLEMENT PATTERNS

Micro settlement form	Population percentage	Mode of Settlement	Locational specificity
Rural	72.3	<ul style="list-style-type: none"> - Major colonization schemes - Highland colonization schemes - Village expansion schemes - Govt. Aided Self-Help schemes - Model villages - Own Housing 	ISLAND WIDE
Urban	21.4	<ul style="list-style-type: none"> - Slums & Shanties - Tenements - Rental Housing - State Owned - Own Housing - Tenement gardens 	<ul style="list-style-type: none"> - Colombo metropolitan - Districts Towns
Estate	6.3	<ul style="list-style-type: none"> - Line Rooms - Tenements - State Owned cottages 	<ul style="list-style-type: none"> - Central Hill country & North West

(Source - Census of Population & Housing - 1981)

7.0 HOUSING STOCK

Sector	1971	1981	Percentage of increase (1971 - 1981)
All sectors	2,217,478	2,811,406	26.8
Urban	421,155	509,459	21.0
Rural	1,558,765	2,084,496	33.7
Estates	237,558	217,451	8.5

8.0 CURRENT CONDITION OF HOUSING STOCK

Census 1981	Number of housing units	Avg. No. of rooms per H.U.	% sup. with pipe borne water	% sup. with wells	% sup. with toilets for ex. use	% sup. with shared toilets	% with no toilets	% sup. with electricity
Urban	509,459	2.59	46.5	48.7	56.8	23.5	20.4	15.9
Rural	2,084,496	2.52	5.1	84.5	55.5	7.9	42.5	8.3
Estate	217,451	1.71	65.6	15.4	18.4	45.1	15.6	5.6
Total	2,811,406	2.47	17.3	73.1	53.0	13.6	35.5	14.9

(Source - Census of Population and Housing - Sri Lanka - 1971, 1981)

9.0 BUILDING MATERIALS/CONSTRUCTION SYSTEM

CONSTRUCTION SYSTEM

	Materials of walls	Materials of roof	Materials of floor	Type of Housing unit
01	Cement blocks, stone bricks or cabok	Tiles, Asbestos, Metal sheets	Cement or wood	Permanent
02	-do-	-do-	Mud	Semi-permanent
03	-do-	-do-	Cement or wood or Mud	Semi-permanent
04	Mud	Tiles, Asbestos or Metal sheets	Cement	Permanent
05	-do-	-do-	Wood or Mud	Semi-permanent
06	-do-	Cadjan, Palmyrah or straw	Cement, wood or Mud	Semi-permanent
07	Wood	Tiles, Asbestos or metal sheets	Cement, wood or Mud	Semi-permanent
08	-do-	Cadjan, Palmyrah or straw	Cement	Semi-permanent
09	-do-	-do-	Wood or Mud	Semi-permanent
10	Cadjan, Palmyrah, or straw	Any material	Any material	Improvised

(Source - Census of Population & Housing - Sri Lanka - 1981)

10.0 HOUSING DEMAND

- 10.1 The population growth during the last 15 years has registered a growth rate of about 2.3%. In 1976 the population growth rate dropped below 2.0%. During the last few years since 1976 the population growth has been 1.7%.
- 10.2 It could be assumed that Sri Lanka will maintain the present low population growth rate in the future too.
- 10.3 The occupancy rate or the average number of persons per housing unit for Sri Lanka is 5-2 compared to 5-6 in 1971.
- 10.4 Yet, the low-population growth rate will make a big impact on the Housing situation for another 10 years or so.
- 10.5 Housing demand could be calculated by taking into consideration the Annual requirement of housing plus the backlog of housing.
- 10.6 According to the present population growth rate (1.7) and occupancy rate (5.2) an annual out-put of about 45,000 - 60,000 housing units would be required in the next 10 years to keep up with the population growth.

10.7 In addition to this the backlog of housing should be added to ascertain the registered demand for housing.

10.8 In the draft Mid-Term plan (1977-1981) prepared by the Ministry of Housing and Construction - the backlog has been estimated at 500,000 units. Research staff of the Marga Institute have made an estimate of 709,763 units (1971).

11.0 LAND AVAILABILITY & TENURE

11.1 One of the principal factors affecting the production of housing is the availability and cost of suitable land.

11.2 In Sri Lanka land use planning and management is not a highly coordinated or organized function.

11.3 Several Government agencies are involved with land use planning responsibilities.

- Ministry of Land & Land Development.

- Ministry of Mahaveli Development

- Ministry of Industries & Scientific Affairs.

- Ministry of Plan Implementation.

- Department of Agrarian Services.

- National Agricultural Diversification & Settlement Authority.

- Ministry of Local Government, Housing & Construction.

11.4 Considerable vacant land exists even in the areas of metropolitan. In addition, much of the developed land is under-utilized.

- (A) Much of the under-developed land is subject to flooding.
- (B) The increase in land costs have increased within recent years.
- (C) The National Land Reform Act of 1973-74 restricted private ownership of land up to a maximum of 50 acres per household.

<u>LAND USE PATTERN</u>		
	<u>Hectares</u>	<u>%</u>
01. Settlements & Associated non-agricultural lands	19534	0.3
02. Horticulture	586309	9.0
03. Perennial Crops:-		
(a) Tea	259473	3.9
(b) Rubber	227373	3.5
(c) Coconut	250464	3.8
(d) Others	54029	0.7
04. Cropland: -		
(a) Paddy	510667	7.8
(b) Land under-developed	43418	0.7
(c) Others	1009704	15.3
05. Improved permanent pasture	2492	-
06. Grassland & Scrubland	425733	6.4
07. Woodland	2899457	44.2
08. Swap & Mash	32787	0.5
09. Un-used land	43147	0.7
10. Inland waters including salterns	<u>204734</u>	<u>3.2</u>
Total	<u>6567330</u>	<u>100.0</u>

12.0 INFRASTRUCTURE : HOW PROVIDED

- 12.1 Water Supply is probably the most critical service and gets the highest priority. In urban areas pipe-born water is supplied by the National Water Supply and Drainage Board or by the local authorities while in rural areas but is supplied through community or private wells.
- 12.2 Sanitation is a critical element in the shelter sector. Flush toilet, Water-seal, Pit-type, Bucket-type, are common in rural and urban areas, while water-born sewerage systems are provided in metropolitan areas.
- 12.3 Electricity: Street lighting is one of the main services of local government institutions in Sri Lanka.
- 12.4 Electrification of Individual housing has to be borne by householders after the service is connected to the house.
- 12.5 Roads: Main roads system of the country is provided by the state; while the inner roads in urban and rural areas are provided and maintained by local government.

12.6 Internal Roads of the neighborhood have to be provided and maintained by the community in rural areas while in urban and metropolitan areas are attended by the local government authorities.

ALUTHMAWATHA SHANTY IMPROVEMENT PROJECT

This is an area typical of a vested shanty settlement where shanty dwellers have been issued with title deeds for the plot of land they occupy. The land as a whole was vested (except for an access path). It was appropriated from a private owner, in keeping with the CHP Law and on the process of re-distribution, deeds were issued. But there are several late arrivals (squatters), after vesting and hence, without deeds. The residual land that remained vacant was also vested, to be used for common amenities.

The scope of the project

The improvement program envisages the following activities being executed at present:

- Provision of infrastructure and services
- Regularization of the settlement lay-out to create useful plot sizes and to facilitate self-help housing
- Sponsoring a loan scheme
- Socio-economic improvement activities and community participation.

The execution of the above project is the responsibility of a voluntary organization. (Redd-Baura) Save the Children Norwegian Project.

(a) Project Area

Total number of Units	...	58*
Families	...	118
Population	...	708
Extent of site	...	165 perches (approx.)

*13 units (23 families) not enumerated during the CPP Law survey in 1975.

(b) Proposed physical improvements

	Standards before	Standards after
Toilets	3	12
Bathrooms	2	8
Water taps	01	8
Garbage Containers	Nil	n.a.
Paved areas .	Nil	13963 sq. ft.
Drains	Nil	3730 sq. ft.
Streetlights	Nil	8

- (c) i) Unit cost for infrastructure improvement - 7,000/-per unit
ii) Maximum loan per house -13,000/-
iii) Number of Housing lots -67

Ownership problems

At the time of preliminary survey, it was discovered that a number of squatters had received the title deeds for the land making them owners. This ownership was created as an outcome of the CHP law. The shanty dwellers possessed full title to the respective lots. However, the plots were of varied and of arbitrary shapes determined by the improvised shanty structures. There were little possibilities to lay the infrastructure and promote self-help housing improvements. It is legally not possible, however, to reorganize the area without the consent of the owners. A participatory process (administered by the executing voluntary agency) has been established to achieve the following:

- a) To accept a reorganization plan for the area whereby the plots were regularized in shape and size to facilitate the provision of infrastructure and amenities. (The acceptance is a pre-requisite to withdraw the deeds and reallocate after regularization). This procedure ensures, that some occupants, are agreeable to the plan of work inspite of minor/major changes in plot size and shape.)
- b) To allocate new plots to squatters of the area who arrived much later than the effective date of vesting, (by making use of the residual unallocated land that remained vested)
- c) To promote self-help housing improvement by mortgage procedure with the local branch of Peoples' Bank.
- d) To encourage socio-economic improvement activities in collaboration with the Voluntary Agency.

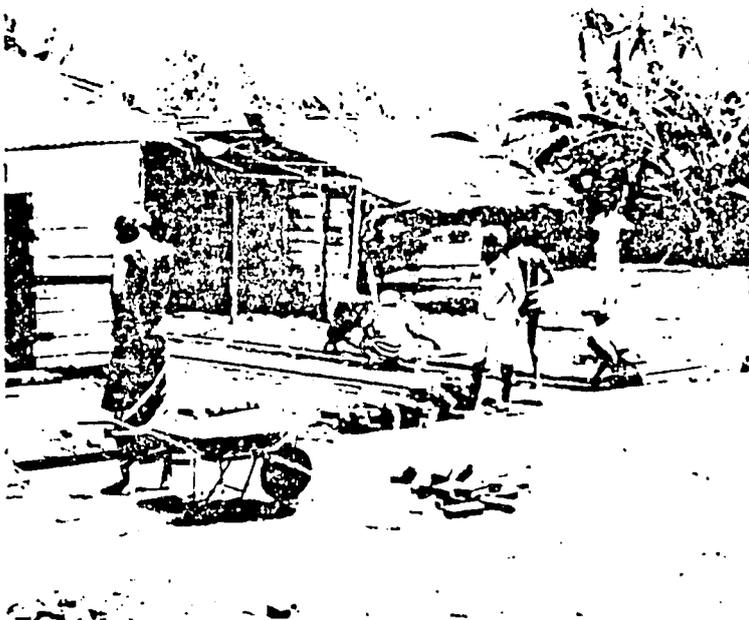
Major Ownership Issues

The existence of a legitimate allocation enables the regularization process easy without confronting any private owner, so long as the allottee consented to accept his plot according to the reorganized plan. Even without the consent of the allottee, (perhaps a negative aspect of the relevant provision) the deeds can be withdrawn, for the purpose of redevelopment. There are cases where subsequent to the issue of deeds, transactions had taken place with outsider. This transaction appears to have taken place, as the quality of environment was not attractive enough to hold the residents. Moreover, no follow up action took place in terms of improvement. The deed could not retain therefore, some of the allottees who opted to move out. The announcement of an upgrading, however made them think of coming back and demand

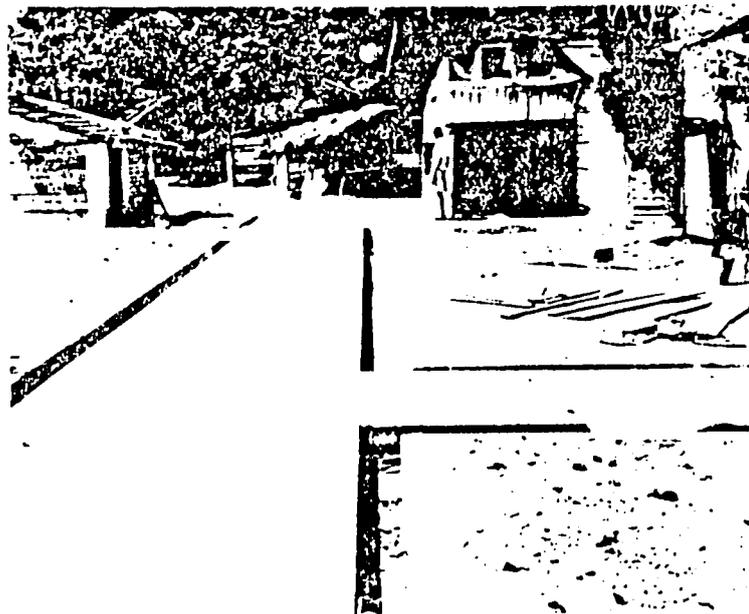
their former houses. To overcome, this problem, a set of criteria was established to determine the allottees. For example, in the absence of a deed, only the occupant of the unit at the time of enumeration is considered eligible for allocation.



① BEFORE IMPROVEMENT



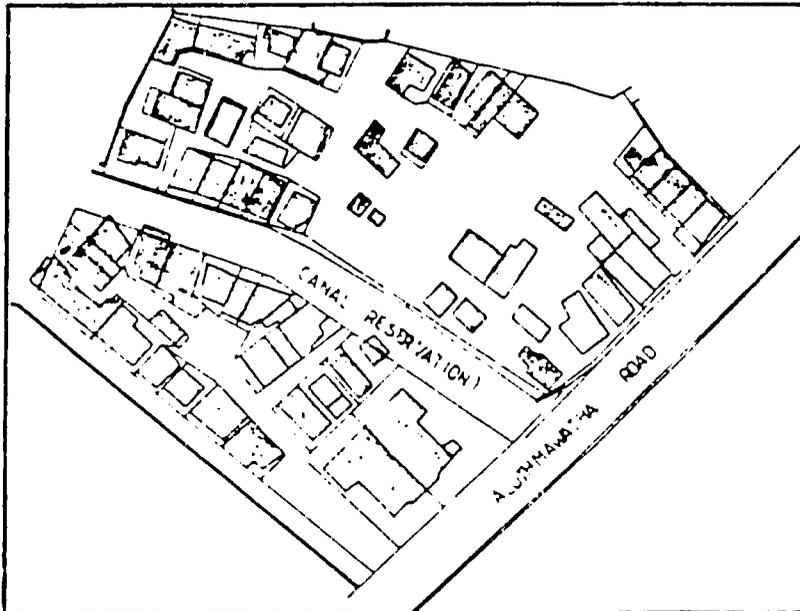
② DURING IMPROVEMENT



③ COMPLETION OF INFRASTRUCTURE
(SELF-HELP HOUSING YET TO COMMENCE)

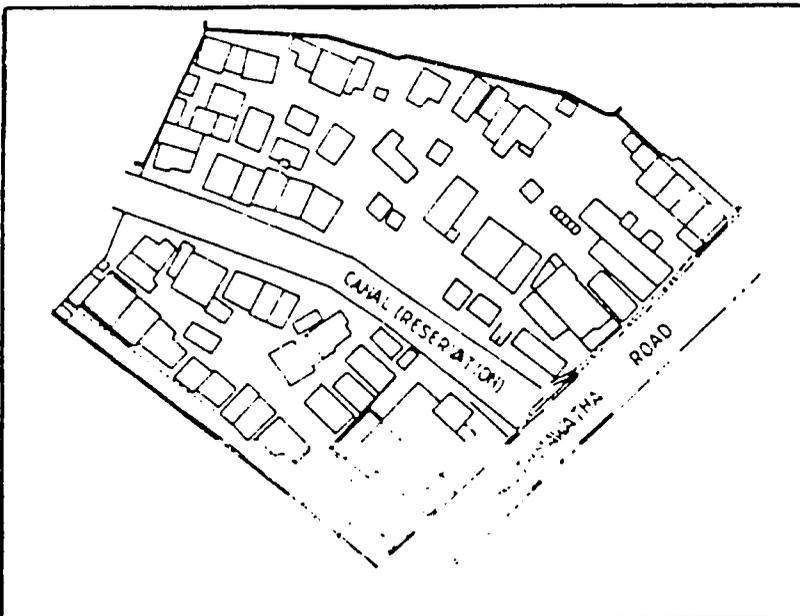
REDD-BARIA

STAGES OF IMPROVEMENT
ALUTHMAWATHA SHANTY IMPROVEMENT PROJECT



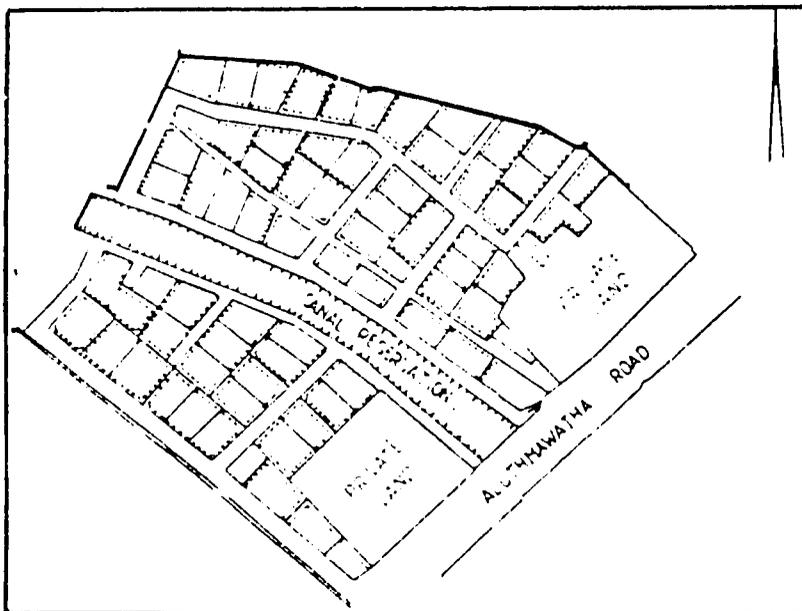
① YEAR OF SURVEY 1975

(STRUCTURES SHOWN WITH BOUNDARIES OF APPURTENANT LAND)



② YEAR OF SURVEY 1979

(NOTE THE ADDITIONAL STRUCTURES AFTER TESTING)



③ PROPOSED LAY - OUT PLAN

STAGES OF IMPROVEMENT
LAY - OUT PLANS FOR ALUTHMAWATHA

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"SQUATTER UPGRADING AS AN ALTERNATIVE TO
SQUATTER CLEARANCE - THE TANZANIAN CASE"

By

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INTRODUCTION

Tanzania is one of the fastest growing countries in Africa in terms of population. The problem of population growth has much been felt in towns where enough resources have not been available to meet the essential services that go with this population expansion.

Formal provision of housing in the urban areas has been relatively quite small and most housing has been provided by the private sector which prefers to build in unplanned areas (squatter areas).

Initial government policy on squatter settlements was to clear them out and replace them with planned settlements. This view was changed later when the approach was found not to be feasible and the government resolved to recognize them and offer them the essential services they lacked.

This paper looks at the growth of squatter settlements in Tanzania and the adoption of "sites and services and squatter upgrading approach" of housing development in the country. It goes further to give the experiences gained through the implementation of the first phase of the project.

1. BACKGROUND MATERIAL:

1.1. Population and Urbanization

Tanzania with a present population of about 17 million and an annual growth rate of 3.3% is one of the most rapidly growing countries of Africa. Since the first national post-independence census in 1967, the population of the country has increased by almost 60%. A number of factors such as increased life expectancy, declining infant mortality, the high fertility rates due to the large proportion of the population of the child bearing age, improved nutrition and water supplies and the high cultural values placed on children may, in fact tend to increase the growth rate of the nation.

Tanzanian towns have also been growing at a relatively fast rate. The rate of growth for the urban population has risen from 6% per year between 1948 - 1957 to about 6.3% between 1957 - 1967. Between 1967 - 1978 the rate of growth rose to around 8% per year. While Dar es Salaam rose from 7-8% per year in the 1957 census to 11% per year in 1967 census, other towns showed a corresponding growth rate.

The Tanzania census classified all settlements with a population in excess of 5,000 persons as being urban areas. In 1967, twenty-one settlements with a total population of 658,482 persons were identified as being urban areas. By 1978, sixty-two settlements with a total population of 2,080,506 persons were so identified.

In 1967, approximately 5.5% of the mainland population was classified as urban; by 1978, the urban population had increased to 12.2% of the total. Estimates by S.M. Kulaba (Kulaba 1981)* indicate that approximately one-third of the population of Tanzania will be urban by the end of this century.

1.2. Urbanization and Unplanned Residential Development.

Reliable data documenting the extent of unplanned urban residential (squatter) development in Tanzania is not available. Estimates have been made, however, which help to establish a general picture of the extent of the situation.

World Bank report No. 1518 - TA dated 9th June 1977 estimates that, "between 40% to 70% of the residents of Tanzania's main towns were living in uncontrolled inadequately serviced squatter settlement. A 1975 estimate of squatter housing in thirteen of the major towns in Tanzania indicated that 72,500 squatter houses existed in these communities which had had a total population of approximately 1,165,000 persons. Conservatively estimating the occupancy rate of squatter housing at slightly more than nine persons per dwelling would indicate that in 1975, approximately 60% of all urban residents in these towns were living in squatter settlements. Observation of urban incomes and past performance in providing housing for urban residents leaves little doubt that well over one-half of the new residents of the urban areas of Tanzania will continue to take up residence in what are commonly referred to as squatter settlements.

1.3. Characteristics of Squatter Settlements.

1.3.1. Location

Most of the squatter settlement in Tanzanian towns have grown in what used to be periurban areas. Due to the extension of the town boundaries such areas now fall within the township authorities. As such, development of squatters should be seen under two phases. The first is the development which occurred before the expansion of the town boundary and second, that which occurred within the township boundaries after such boundaries had been extended.

Under the Freehold Title Conversion and Government Leases Act of 1963, land owners were required to take up long term leases. Many individuals who farmed and occupied suburban fringe land, under tribal or traditional law, did not understand the new act and therefore did not apply for or receive leases. As urbanization took place, these individuals continued to subdivide "their" land and "sell" it off in small parcels, at very reasonable rates for housing. This practice continued unabated and large urban areas have been occupied in this way. Since the government was not able to offer an alternative to this informal procedure, it was politically and socially difficult to stop it.

1.3.2. Social Economic Features:

The squatters tend to gather and live in regional or even tribal groupings thus maintaining much of their accustomed lifestyles. A study carried out in 1976 in Manzese, one of the squatter areas at that time in Dar es Salaam with a population of about 100,000 people, showed that about 50% of the squatter population was made up of two tribes originating from three regions. (Tanzania has about 122 tribes with 20 administrative regions.) Each region grouping tends to act as a reception area for incoming rural migrants, who have problems adjusting to urban life, and provides them with a community framework.

As has been stated before, many of the squatter areas are former suburban villages that have simply been swallowed by the expanding city. These village units, though visually integrated

with the city, retain much of their physical and social structure.

Hence, these expanded villages have been endowed with character and a sense of order and place as well as a feeling of community which is irreplaceable in newly planned communities. Most of the houses in squatter areas are owner occupied, although there is also an element of renting. This factor, coupled with the potential compensation factor, causes owners to keep maintenance up, hence the visual impression of squatter areas is that of constant building and rebuilding.

As regards employment, a large proportion of the heads of households in the squatter settlements are employed. A study carried out in Manzese, a settlement that has been upgraded, showed that about 15% of the household heads are employed full-time in the formal sector, 22% are self-employed, and the rest are unemployed. About 22% of those employed work in the manufacturing sector, and 17% work in administrative services. The rest work mainly in communications under manufacturing. About 80% work as manual laborers.

1.4. Government Policy on Squatter Development Before 1972:

Before 1972, when the Sites and Services and Squatter Upgrading Project was launched, the Government and, in particular, planners regarded squatter areas as unsightly in the urban areas. The houses, which were built with traditional materials, were considered inferior and the Government at the time advocated the clearing of such areas.

It is unfortunate that whereas the Government deplored such houses, it did not offer alternatives for the high demand of housing which was growing year after year.

A National Housing Cooperative was started in 1962 and was given the task of providing housing for the low and medium income people. However, its impact on the provision of housing was not felt very much because it spent nearly all the resources available to build houses to replace those which were demolished.

2. SITES AND SERVICES AND SQUATTER UPGRADING PROJECTS

In 1972, the Tanzania Government emerged with a different view concerning squatter areas. It agreed on a squatter improvement policy. In arriving at this policy, the Government realized that:

- There would be significant savings in that the domestic savings of the people represented by their investment in existing housing would not be destroyed.
- There would be significant savings on the part of the Government since the Government will not be required to pay large amounts of money for compensation, nor would it have to find money for low income rental subsidies.
- Manpower and recurrent expenditures would not have to be stretched in order to rapidly expand government institutions established to construct residential houses.
- There would be savings in social costs in that existing viable communities would not be destroyed.

- 2.1. A unit was established in the Ministry of Lands, Housing, and Urban Development in 1972 to oversee the implementation of the new approach. In regard to squatter upgrading, the unit was commissioned
- (i) To engage in the process of legalizing squatter land holdings by giving them long term leases and at the same time removing

the stigma of 'temporary classification' from squatter houses. This would totally legalize the status of current squatters and remove the possibility of future clearance. With the legalization one would expect to see housing improved beyond the minimum standards required for compensation.

- (ii) To prepare layouts for squatter areas respecting existing communities and to provide substantial services including roads, drainage, water supply, and electricity and community facilities with community education centers, markets and health posts.
- (iii) To find some means of getting low interest funds to low income people who wish to upgrade their existing houses.

2.2. In 1973, the Ministry of Lands, Housing and Urban Development prepared its first National Sites and Services Project. The implementation of this project was to be aided by a loan from the World Bank. The project was supposed to provide about 9,000 serviced plots and upgrade about 9,000 houses. In all, the project was to benefit about 160,000 low income residents. The main objectives of this phase were -

- (i) To demonstrate the suitability of the S/S approach of housing development for low income urban dwellers.
- (ii) To strengthen Government institutional capacity to carry out similar projects of its own in the future.

2.3. Implementation Arrangement:

2.3.1. Executing Agency:

The executing agency was the Ministry of Lands, Housing, and Urban Development which had overall responsibility for the

project. The Sites and Services section with the Ministry was responsible for planning, designing and construction of the infrastructure and community facilities in consultation with concerned Ministries. The local administration (i.e. plot allocation, collection of payments, etc.) were handled by the respective Regional Land Development Offices (R.L.D.O.). The Tanzania Housing Bank (THB) gave loans to individual plot occupants and cooperatives for house construction.

The Sites and Services section engaged a consulting firm for detail engineering and construction supervision of all sites. To assist the regions in local administration, the section was supposed to provide a site office on each site staffed with site officer, building inspector, and funds. (There were to be artisans who were to provide advice and technical assistance in self-help construction and building techniques.)

The R.L.D.O.'s were supposed to have direct responsibility in the regions for project administration, including land acquisition (compensation payments, issuing of Rights of Occupancy and collection of grand rents, premiums and fees). The R.L.D.O. was also supposed to assist in the formation of housing cooperatives, coordinate with local offices and agents of the THB and work with the site offices. The R.L.D.O. consists of three functional limits, i.e. land, surveys and town planning.

2.3.2. Administration

The R.L.D.O. working with the Sites and Services section was supposed to process applications for Rights of Occupancy and allocate plots. Project information was to be circulated to persons on the National Housing Cooperation and the district

waiting lists and disseminate through the bureaucratic and CCM (Chama cha Mapinduzi - name of the ruling political party) framework, place of employment and by the mass media. Interested parties were to apply to the Ministry of Lands, Housing and Urban Development Headquarters, who were to send all applications to already functioning District Allocation Committees in the regions. The composition of these committees varied nationwide, but usually included representatives from R.L.D.O.'s, CCM officials and members of national organizations such as United Women of Tanzania. The following items, among others, were taken into account when considering who was to be given preference:

- (i) persons who were previously displaced by public works projects.
- (ii) the number of immediate dependents.
- (iii) the length of time on one of the above waiting lists.
- (iv) employment in the towns where the sites are.
- (v) households with monthly incomes of less than T.Sh.1,000.

The R.L.D.O. was to issue long term Right of Occupancy (25 years) to allottees in the new areas. Plot occupants in squatter improvement areas were to have the option of applying for either a short term or long term Right. The Rights were to be issued on an owner - occupier basis, however, subletting of rooms was to be permitted. Should the plot owner decide to sell his house, his Right was to revert back to the Government

for re-issuance to a prospective buyer meeting the eligibility criteria. If the Government later decided to withdraw the Right to use the land for public purposes, the plot occupant was to be eligible for compensation and assistance in relocating.

The long term Right of Occupancy requires that permanent construction is undertaken. Upon issuance of this Right, national building codes apply and minimum value or cost of the house to be constructed is stipulated as a covenant or condition. While a long term Right is issued to the plot occupant, the Government waived application of building codes and abolished the covenant for this and future projects.

2.3.3. Construction Loans

The Tanzania Housing Bank, which was started in 1973, was supposed to provide loans for house improvement and the construction of new houses in the project sites.

The Bank offers loans to low income people at 6% interest for up to 20 years for house construction or improvements. The advantage of increasing this rate was discussed with the Government:

- (i) To mobilize domestic savings and
- (ii) To increase the replicability of Sites and Services projects. Nevertheless, IDA accepted THB's prevailing rate because
- (iii) It is in accordance with Government policy to subsidize low-income housing and since IDA proposed contribution was small relative to THB's need, the Government decided not to change this policy, and
- (iv) A new rate for lending IDA funds would have complicated the administration of THB lending program and

would have created equity problems among its borrowers.

The THB prepared lending policies and procedures for housing cooperatives and individual applicants in sites and services areas. In loans, THB must satisfy itself that the borrower can repay without undue hardship, and that adequate provision exists for the enforcement of the repayment. Each construction loan application must be accompanied by a long term Right of Occupancy, and be secured by a first mortgage, if the applicant's employer or another suitable source or means can be provided for security. Households are encouraged to join cooperatives because it is felt that this approach fosters communal living, results in low cost housing and facilitates loan payment collection. When considering applications from individual plot occupants, household incomes are taken into account. The THB's lending procedures provide for an upper limit for soft loans which can be changed from time to time in accordance with housing construction costs. Cash disbursement on loans are tied to a construction and inspection schedule, agreed to by the plot occupant and the THB. The loan normally carries a one year grace period. When considering applications from housing cooperatives, household and prospective rental incomes are also taken into account, but in a collective sense. Thus as cooperative members, a very low income household has access to credit secured by the cooperative. The loan covers the needs of all the cooperative members, and arrangements for monthly payments, disbursements, construction and inspection,

and grace are similar to those of an individual loan applicant, although they are handled through the cooperative.

2.3.4. Plot Charges

For pricing purposes, the infrastructure costs are allocated to the residential and community facilities areas. The allocation criteria charge all off-site infrastructure and consultants' costs to the Government. The land acquisition and on-site infrastructure costs are shared by the residents and community facilities. The community facilities are charged in direct proportion to the area they occupy with the residential plot occupant paying the remainder, i.e., roughly 75% of the land acquisition and on-site infrastructure costs.

An individual monthly plot payment includes the ground rent, payment of the construction loan and utility bill, if any. The ground rent consists of the statutory ground and the chargeable ground rent. The statutory rent is a charge levied by the Treasury for the privilege of using the land. The chargeable rent is based on the cost of the infrastructure provided.

3. SQUATTER UPGRADING PROGRESS

3.1. Site Selection

- (i) Having been assigned the budget on which to plan, the project unit set out to select the squatter areas on which to operate. This was necessary because even for Dar es Salaam, resource allocation was not adequate to cover all squatter areas.
- (ii) The project unit did very preliminary feasibility studies. This involved selling the idea of squatter upgrading to the

the leaders in the squatter settlements.

- (iii) Having established the priority list for each selected squatter area, the following was investigated:
- The area should satisfy the town's long-term development plan, i.e. it should have been designed for residential purposes or it is to remain residential in the future.
 - The settlement should be of a reasonable size to allow for economies of scale during the provision of the essential services.

3.2. Design Criteria and Standards

- (i) In preparing the physical plan, provision was made for vehicular circulation for each block of homes or plots, allowing for easy access to residential areas, community facilities, and the main truck roads while protecting the settlement from unnecessary through traffic. A convenient network of foot paths was also provided linking plots to public areas and to the transportation system.
- (ii) The design standards for infrastructure services were adopted after considering the requirements of the squatter upgrading project as well as the prevailing standards in the country. The standards are kept low enough to bring per plot costs within the reach of the low income people. However, provisions are made in the design for improvements later on.
- (iii) Roads
- Three classes of roads have been provided for in the project. Class A roads, which are classified as collector roads, are designed to accommodate the heavy bus traffic. The road

reserve is 30 meters wide with an initial carriageway width of 6 meters. These roads have a treated dry macadam surfacing with a mechanically stabilized gravel base. Shoulders, 4.5 meters wide, are provided to allow for future expansion of the carriageway. Class B roads, which are classified as primary roads, are designed to serve as main vehicular access to the settlements. These have 20 meter wide road reserves and 4.5 meter wide carriageways of rolled gravel. Shoulders of 3.25 meters are provided on each side of the carriageway for cyclists and pedestrians. Class C roads, classified as secondary roads, are dirt roads which serve as vehicular and pedestrian access to the individual housing units. The road has a 10 meter reserve and a 5 meter wide roadway.

(iv) Drainage

The drainage system is designed to carry storm water and domestic water exclusive of the latrines. The system consists of open ditches with culvert at vehicular crossings. The ditches are unlined, except in steep areas where erosion could occur due to high velocities. Sanitary services are provided through improved pit latrine which are constructed by the house owner.

(v) Water supply

The design has assumed that ultimately all houses will have private water connections. Initially, however, the plot occupants are being served by water kiosks, one for every 50 houses or a minimum walking distance of 150 meters. Kiosks serving the 50 houses are provided with 4 taps, while those serving less are provided with 2 taps.

(vi) Power Supply

The design of the power supply systems assumes that power will be required mainly for lighting purposes. And that ultimately, through conversions of transformers to larger units, street lights along the main roads and power to community facilities will be provided.

(vii) Community Facilities

The planning of these facilities (markets, schools, health services, and post offices) has adhered very much to the national standards.

These include a three stream community education center (1 stream contains 45 pupils) for a population of 4,500 - 5,000 people, a dispensary for 15,000 people and a Health Center for 50,000 people. The standard for education assumes 50% enrollment.

3.3. Physical Investigation

In most cases, the physical investigation necessitates commissioning a full-fledged preliminary engineering exercise. Such investigations are required to provide information on the following issues:

- (i) Base map indicating to the extent possible, the contours, prominent topographical features, existing buildings and services.
- (ii) An assessment of on-site and off-site existing facilities to include roads, water supply, power supply, sewerage, and stormwater drainage.
- (iii) An existing land use map.
- (iv) A soil investigation report to establish sketch design criteria for roads and recommendations for the form of sewerage.
- (v) A recommendation on the modifications to the standards set with a view to reduce costs.

3.4. Planning

- (i) In planning for infrastructure in squatter settlements, planners have been called upon to compromise a number of well-established planning principles. While a reasonable level of infrastructure has to be provided, there should be a minimum demolition of houses. Further, planners have had to avoid expensive houses to cut down on the compensation bill.
- (ii) In planning for community facilities, planners have had to make the best use of the existing open spaces to be able to cut down on the compensation bill.
- (iii) After having produced the preliminary plans, the planners took them back to the community leaders. Before discussing the plans, the planners explained in detail the proposed services to be provided and the principles following in the planning exercise. The plans to be discussed with the community leaders are prepared on enlarged up-to-date aerial photographs. It has been established that whereas the community leaders cannot very easily understand a drawing, they can very well orient themselves when an enlarged aerial photograph is used. The same aerial photographs are used to make the infrastructure lines and to locate the proposed sites for community facilities. While discussing the proposed plan, the residents concentrate more on which houses will be demolished or how far their houses will be from the proposed community facilities. The planners have to strike a balance between applying the inevitable planning principles and securing the blessings of the community leaders.
- (iv) The preliminary plans are then finalized and submitted to the relevant local urban planning committees for approval.

- (v) While planning the squatter settlement, the planners have had to simultaneously plan for an overspill area or areas for resettling those people whose houses will have to be demolished to give way to the infrastructure services and community facilities. Those affected have to be given a plot the very day they get paid compensation for the demolished property.

3.5. Detailed Engineering Design

- (i) After approval by the relevant local authorities, the plans are submitted to the engineers who will have been commissioned to undertake detailed engineering design for all the infrastructure. So far, the unit has had this work done by consultants. The consultants are selected through International Competitive bidding, a system followed in World Bank financed projects. In performing this assignment, the engineers are required to undertake:
- Field surveys including traverse, setting up of beacons and bench marks properly referenced for infrastructure works.
 - Additional soil investigation.
 - Detailed designs and drawings and specifications for infrastructure works based on field surveys.
 - Strip maps for all right of ways for identifying house/crops for compensation.
 - Bills of quantities for each component of work.
 - Tender documents.

During detailed engineering design, the layout as conceived in the preliminary engineering stage is expected to be followed in most cases. However, minor changes may have to be made to the layout during approval procedures and to suit the actual situation at the site at the time of

detailed field surveys. The consultants may also recommend revisions on the standards. These suggestions should be to improve upon the original design always keeping in mind that the project is essentially for the low-income, as such, suggestions should be aimed at lowering the cost.

3.6. Valuation and Compensation

- (i) The government valuer or an appointed representative of the government valuer moves in to value all property marked in the strip maps. A valuation report is then prepared on a compensation schedule. The information prepared includes the name of the owner, address, property valued, and monetary value of the property so valued.
- (ii) Based on the valuation report, the Project Unit prepares individual checks which are paid out to those concerned on a set date and time.
 - The payee has to produce documentary identity and has to be further presented by his local leader as the rightful owner of the property under which compensation is being paid. The local leader will by then have cleared all conflicts regarding the rightful owner of the property which is being compensated.
 - The very day an individual is paid for his property, especially a house, he should be given an alternative plot in the overspill area and served with notice to vacate. This arrangement has been found to be necessary, otherwise individuals spend all the money on items other than a new house and it later becomes very difficult to make them move.

- According to the law, once individuals are paid compensation, they are required to move out with only their belongings and to leave the buildings intact. Because of the fact that the incomes of the individuals affected are very low, and that compensation is not based on replacement value, the Project Unit has allowed such individuals to demolish their own houses and to carry with them the usable building materials to their new sites. It is believed that such materials, plus the amount of money paid out as compensation, can be enough to allow for the construction of a livable new house.
- At the beginning, the Project Unit left all the moving arrangements to the individuals concerned. As an extended assistance, the Project Unit will now provide transportation and related assistance to those who will be affected by the demolition and resettlement.

3.7 Construction of Infrastructure

- (i) The project unit does not have a construction wing. The work carried out so far has been given to private contractors through competitive bidding. The consulting engineers have been working as agents of the project unit in preselection of contractors, advertisement of tender proposals, and evaluation of the same, including recommendations on suitable contractors.
- (ii) After an award of the contract, the consultants undertake general and site supervision until the project is completed. In so doing, the consultants, on behalf of the Project Unit, ensure that the work is carried out according to the terms and conditions of the contract, and submit certificates of payment to the Project Unit

which makes the payments to the contractors.

- (iii) It has been argued that the Project Unit could save money if the contractors would undertake to do their work in partnership with the residents of the squatter communities. The communities would do all the preliminary work. This work would include digging ditches for the water pipes and such related work. The contractors would bring in the materials and undertake to install the same. Such an arrangement has not yet been tried by the Project Unit. It is however, felt that such an undertaking would be administratively cumbersome, especially because of the need for very close coordination between the timing of the contractors and the work schedules of the local communities. Further, it is argued, that the squatter communities have enough work since, in addition to working as employees in either the formal or informal sector, they also have to either build their new houses or engage in rebuilding their existing houses.

3.8. Community Facilities

- (i) Detailed drawings for community facilities have been prepared by a team composed of consultants, staff of the project unit and staff from the Buildings Department of the Ministry of Works. The design standards very much reflect the existing national standards.
- (ii) Like the case of infrastructure, the Project Unit assigns construction of the community facilities to private contractors through tendering.
- (iii) Supervision arrangements are similar to those provided under the construction of infrastructure except that in place of consultants, the Ministry of Works and Regional Civil Engineers serve as the Project Unit's agents.

3.9. Maintenance of Infrastructure and Community Facilities

Operation and maintenance of the infrastructure and community facilities is the responsibility of the local authorities and funds for this purpose are supposed to be provided in their annual budgets. For the infrastructure, operation and maintenance, work is carried out by the regional field staff of the respective ministries and parastatals (i.e. Ministry of Water Development, Energy and Minerals; Ministry of Communications and Ministry of Works). For the community facilities, staffing, operation and maintenance is carried out by staffs in the regional administrations under the direction of the Regional Development Director, under present organization, this will be undertaken by relevant urban councils.

4.0. House Consolidation and Socio-Economic Services

- (i) House consolidation in squatter upgraded areas is pursued on two levels. The first level is the individual level covering all those people who resided in the area before improvement. Those individuals who have old improvable houses are offered credit facilities to improve their houses.

The Tanzania Housing Bank handles these clients through a house improvement loan system. It has been necessary for the Project Unit to monitor and recommend to the Bank on who should get such loans so that control is put on possible overcrowding through construction proliferation due to new immigrants.

- (ii) Another level of consolidation is at the community level. Here the people are encouraged to form Housing Cooperative Societies which mostly take on the form of residential neighborhood groups. These societies primarily are formed to provide their members

with dwelling houses, and can be the basis of multiple socio-economic improvements through self-help activities.

- (iii) There is technical aid which is offered to builders in the squatter upgrading areas. Advice on the use of cheap and locally produced building materials is offered to the people in consultation with the Building Research Unit of the Ministry of Lands, Housing and Urban Development. Material depots have been built in some of the project sites by the Tanzania Housing Bank. These depots serve to provide building materials to the builders more conveniently.

4.0. EXPERIENCES

The implementation of the first sites and services project is now complete. What remains is house consolidation within the newly opened residential areas which naturally will take some time. It is worthwhile to look at what we have learned through the course of implementation of this phase. These experiences may be of use in the preparation of similar projects in the future.

- (i) The problem of displacement of squatters and their resettlement remains a major problem. When squatters were displaced to make way for community facilities, roads, etc., they were expected to resettle in other areas which are normally planned. Yet the fact is that many of them did not move to these areas, but sneaked into the original area to fit themselves into the improvement. The Government has now started a program of registering houses within squatter areas for the purpose of revenue collection. It is hoped that new developments will be curtailed.
- (ii) The country has had a long experience in the construction of community facilities through self-help. The people are provided

with building materials and they provide all of the labor and actually organize themselves and undertake all the construction work. This arrangement has operated well in rural areas, but is not well established in the urban areas, especially in planned areas. There are very few signs of such an undertaking in the squatter settlements.

It has been urged that the Project Unit could save money if the contractors would undertake their work in partnership with residents of the squatter communities. The communities would do all of the preliminary work. Such work would include the digging of ditches for the water pipes and such related work. The contractors would bring in the materials and undertake installation of the same. Such an arrangement has not yet been tried by the Project Unit. It is however felt that such an undertaking would be administratively cumbersome, especially in regard to the need for close coordination between the contractor and the work schedule of the local communities. Further, it is urged, that the squatter communities have enough work since, in addition to working as employees in either the formal or informal sector, they also have to either build their new houses or engage in rebuilding their existing house.

- (iii) In the first phase of the project, experience has shown that there is a need to establish maximum coordination between the Project Unit and the bodies that will be responsible for the maintenance of the infrastructure and community facilities. If funds are not reserved early enough so that they are available for this work immediately when construction is complete, chances are

that most of the services will degenerate quickly and it will very expensive to bring them to good condition again. The degeneration is attributed to the fact that most of the services offered are of low standard and are in need of frequent maintenance.

- (iv) A number of the people who are expected to improve their poor houses or build new houses through the housing improvement loan system fail to meet the Tanzania Housing Bank conditions. The security of employment and having a bank account are some of the conditions attached to the loans. It is unfortunate that the Tanzania Housing Bank has failed to open its housing credit facilities to the poor who are employed in the informal sector of the economy.
- (v) The provision of water through public kiosks is creating administrative and financial problems. According to Government policy, such water is free. The maintenance of the kiosks (fittings and the stand) is the responsibility of the local authorities. It is being urged that in the long run the maintenance bill will be high.
- (vi) In planning upgrading proposals, it is advisable to involve the people of the area formally by holding meetings and sharing ideas with the help of local representatives like tenceil leaders. This has a further merit in ensuring greater control over the growth of squatter in potential areas earmarked for infrastructure like roads, community facilities, etc., as people will help to police these areas. Thus the incidence of speculative building with the object of obtaining compensation, would be controlled and also the

cost of demolition as the people of the area will have developed the pride of participation in the project planning.

(vii) Quite a number of high income people have infiltrated the new Sites and Services areas; this infiltration has been more than had been expected. This could partially be attributed to the fact that such people had not been catered to in terms of plots, and also the nature and quality of facilities offered in such areas in relation to the present urban standards, could still be accepted by the high income people. Hence, it is important that such projects be designed for an income group rather than income group limitation decided in relation to project design. The high income groups should also be availed of alternative plots when one is operating a Sites and Services project. If it is not done, the chances of the low income group being pushed out of the project by the high income group in one way or another are very high.

(viii) Considering the operation of the Tanzania Housing Bank, the repayment ability of an applicant is determined on the basis of 25% of his regular documented income. When the loan entitlement is related to prevailing house cost estimates, it is found that many of the low income people cannot be accessible to the loan if they really want to build just a moderate house.

The policy of "phase development" should be examined in this case. Greater initial emphasis should be on basic minimum requirements such as the foundation, walls, door and windows to be improved gradually over time by the owner himself for such things as finishes, fittings and connections. It could also be done for

the infrastructure services.

- (ix) The issue of building standards also needs to be examined when one wants to increase the pace of building consolidation. There is no point in sticking to high standards, if by doing so the nation will only be able to house only a small fraction of its people. The use of cheap building local materials like "mattle and doub" should be examined. Existing building regulations are out-moded and they are far from present realities. They should be reviewed. They should be proscriptive and not prescriptive - they should tell builders "what not to do" and not "what to do". Some of the building regulations specify in detail the materials to be used and the standards to be used. They do not leave room for the absorption of changes. If the regulation could explain broadly the framework in which to work, there would be room for the investigation of the use of building material that can save money.

REFERENCES

1. J. M. Mghweno, Human Settlement Upgrading Process: Problems and Solution: Paper presented at symposium on Planning of Human settlements and Development. Ardhi Institute, Dar es Salaam, May 16 - 19, 1979.
2. S. M. Kulaba, Housing, Socialism and National Development in Tanzania: Center for Housing Studies Bonwcentrum International Education Publications. Occasional paper No. 1, March, 1981.
3. B. A. Seleki, Sites and Services Project for Low Income People in Tanzania; Post Graduate thesis presented at the D.P.V. University College London. June 1979.
4. International Dev. Association: Appraisal of National Sites and Services Projects - Tanzania. May 1974.
5. Dr. A. C. Mosha, The Process of Urbanization in Tanzania: A paper presented at an International Symposium on "The Planning of Human Settlements and Development." Ardhi Institute, Dar es Salaam. May 1979.
6. C. A. Blunt, Sites and Services: Report by Consultant in charge of monitoring and evaluation. Dar es Salaam, 1976.
7. Housing Development Division, National Sites and Services Project: First draft of the project proposal. Dar es Salaam, September, 1981.

APPENDIX

Tanzania - General Information

1. Brief Background Information on the Country.

1.1. Tanzania is a relatively large country encompassing approximately 931,082 square kilometers (363,708 square miles) including the two islands of Zanzibar (1,638 sq. km.) and Pemba (973 sq. km.).

It is located close to the Equator on the East Coast of Africa with Zambia, Kenya, Uganda and Zaire among its eight neighbors. Because of its altitude, Tanzania has a largely sub-tropical climate. With the exception of a few mountains, most of the country forms a plateau lying 3,000 - 5,000 feet above sea level. This plateau is characterized by a combination of grassland and woodland, with small areas under cultivation, and a few game and forest reserves scattered throughout the country. It has been estimated that about 75% of the land area is either uninhabited, or difficult to manage because of either the tsetse fly or unreliable rainfall. Thus the majority of human settlements in Tanzania are confined to less than a quarter of the total land area of the country.

However, these geographical limitations are not insurmountable especially with relation to housing and urban development because of present advances in technology and science which can enable mankind to overcome them easily. For example, it is possible to eradicate the tsetse fly and probably at a lesser cost than if urban or housing development were to take place on reclaimed land formerly covered by a lagoon. Indeed, these natural limitations are less restrictive in urban development than in agricultural development.

1.2. Tanzania has a population of about 17 million. 12.2% of this population lives in the urban areas (in Tanzania a settlement with a population of about 5,000 is classified as an urban center). The country has a national annual population growth of about 3.3%.

1.3. 1980 DISTRIBUTION OF URBAN HOUSEHOLD EXPENDITURES - TANZANIA

	<u>Monthly Household Expenditure</u>	<u>% of Households</u>	<u>Cumulative</u>
T.sh.	0 - 94	6%	6%
	95 - 187	9%	15%
	188 - 374	20%	35%
	375 - 562	22%	57%
	563 - 749	15%	72%
	750 - 937	10%	82%
	938 - 2343	15%	97%
	2343 - and over	3%	100%

Notes: Mid-1977 updated to Mid-1980 at 4% compounded inflation per annum.

Source: World Bank paper No. W-8/7-1. 1980.

\$1.00 = 10 T.sh.

2.0. SHELTER SECTOR CHARACTERISTICS

- 2.1. Generally, there is no shortage of land for housing developments and problems of land assembly and ownership are not significant because all the land is in public ownership. In particular, Tanzanian land law bestows rights of use and not ownership over land on those leaseholders who hold Certificates of Right of Occupancy. Those certificates are for periods of 33 or 99 years, given development conditions.
- 2.2. About 95% of residential dwellings in Tanzania are built by households themselves with or without temporarily employed labor. The vast majority of residential houses are built out of locally available building materials. In 1977, more than 95% of floor, foundation and wall construction and more than 70% of the roofs were built of materials available on the site or within walking distance from the site. 45% of walls were of mud and pole construction; 32% of poles, branches, grass; and 16% of mud blocks on in situ mud. 1% of the roofs were constructed out of grass or leaves and 11% of mud. The only non-locally produced material which has notably increased during the last 10 years is metal roofing sheets, which covered 26% of the houses in 1977 compared to 17% in 1969. The average life of such houses built out of entirely local materials is somewhere around 7 years.

The pattern of using locally available materials is, in principle, relevant both to rural and urban areas. But because of a better supply of new factory-produced materials in urban areas, and because of a shortage of some of the local materials such as grass, leaves, and poles, the use of factory produced materials is more common in urban areas than in rural areas.

3.0. Brief Description of the Agency and Its Principal Functions.

3.1. The Ministry of Lands, Housing and Urban Development is responsible for:

- Planning policy and strategy for development of urban areas (and assisting the Prime Minister's Office, which has primary responsibility for coordinating development in rural areas).
- Developing housing policy and leading its implementation.
- Protecting titles to land through Land Registry.
- Adjudicating disputes over land and buildings through a Rent Tribunal and a Customary Land Tribunal.
- Providing mapping services.
- Compulsorily acquiring land and buildings.
- Carrying out national sites and services projects.
- Performing valuation work.

The Ministry also helps the regions in:

- physical planning (mainly urban, but also rural) reviewing the region's work and carrying out complex planning on the region's behalf when requested;
- legal advice and assistance in processing land allocation matters;
- technical advice and assistance with surveying work;
- skilled manpower to staff the regions and district.

The Ministry is divided into 7 Divisions headed by Directors.

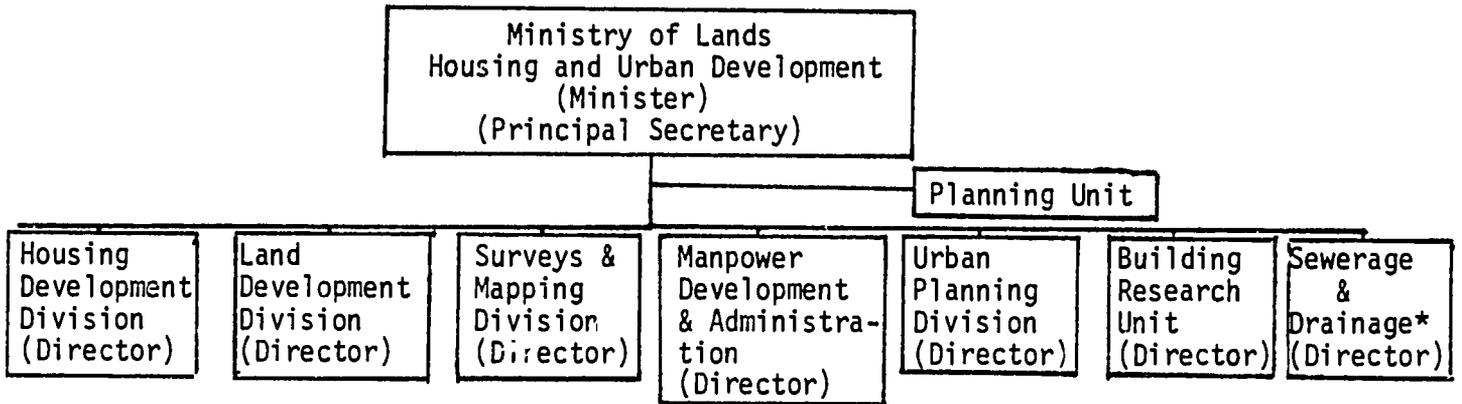
The Division I am working with is the Housing Development Division.

Its functions are:

- contributing to the formulation of housing strategy;
- developing national housing programs whereby that policy will be achieved.
- carrying out national sites and services projects;
- coordinating the supply of funds for housing programs;
- monitoring activities in the housing sector.

3.2. At present the Division is implementing the second phase of the National Sites and Services Project. The Ministry has planned to spend about T.sh. 131,636,000 (\$13,000,000) this financial year and the Housing Development Division expects to spend about T.sh. 51,847,100 (\$5,000,000). In addition, it is providing technical assistance to the regions for issues relating to housing development.

ORGANIZATION CHART



*This Division was recently shifted from another Ministry to this Ministry.

THAILAND

Country Presentation

Presented to the 4th Annual International

Workshop for Senior Professionals

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I. BRIEF BACKGROUND INFORMATION ON COUNTRY

1. Geography

Thailand lies entirely within the northern tropical zone between latitudes 21 and 5 in the center of Indochinese Peninsula. It has an area of approximately 514,000 square kilometers. The geographical outline of the country may be compared to an axe with the Malay Peninsula being the handle. The maximum distance from north to south is about 1,650 kilometers, and from east to west is 800 kilometers. The country has common frontiers with Lao People's Democratic Republic on the north and east, with Burma on the north and west and with Democratic Kampuchea on the south and east. The peninsula of Thailand is bounded on the south by Malaysia and partly on the west above latitude 10 by Burma.

The country is tropical but represents a regionally varied landscape of forested mountains, relatively dry plateaus and fertile river plains. A broken mountain upland rises in the north above the low platform of the dry plateau in the northeast. West of the plateaus is the Central Plain, the basin of the Chao Phraya River and its tributaries, stretching from the mountains in the north to the Gulf of Thailand. Dominating this alluvial plain is Bangkok Metropolis the national capital, which is situated above the mouth of the river about 24 kilometers north of the Gulf of Thailand.

2. Population, Urban and Rural

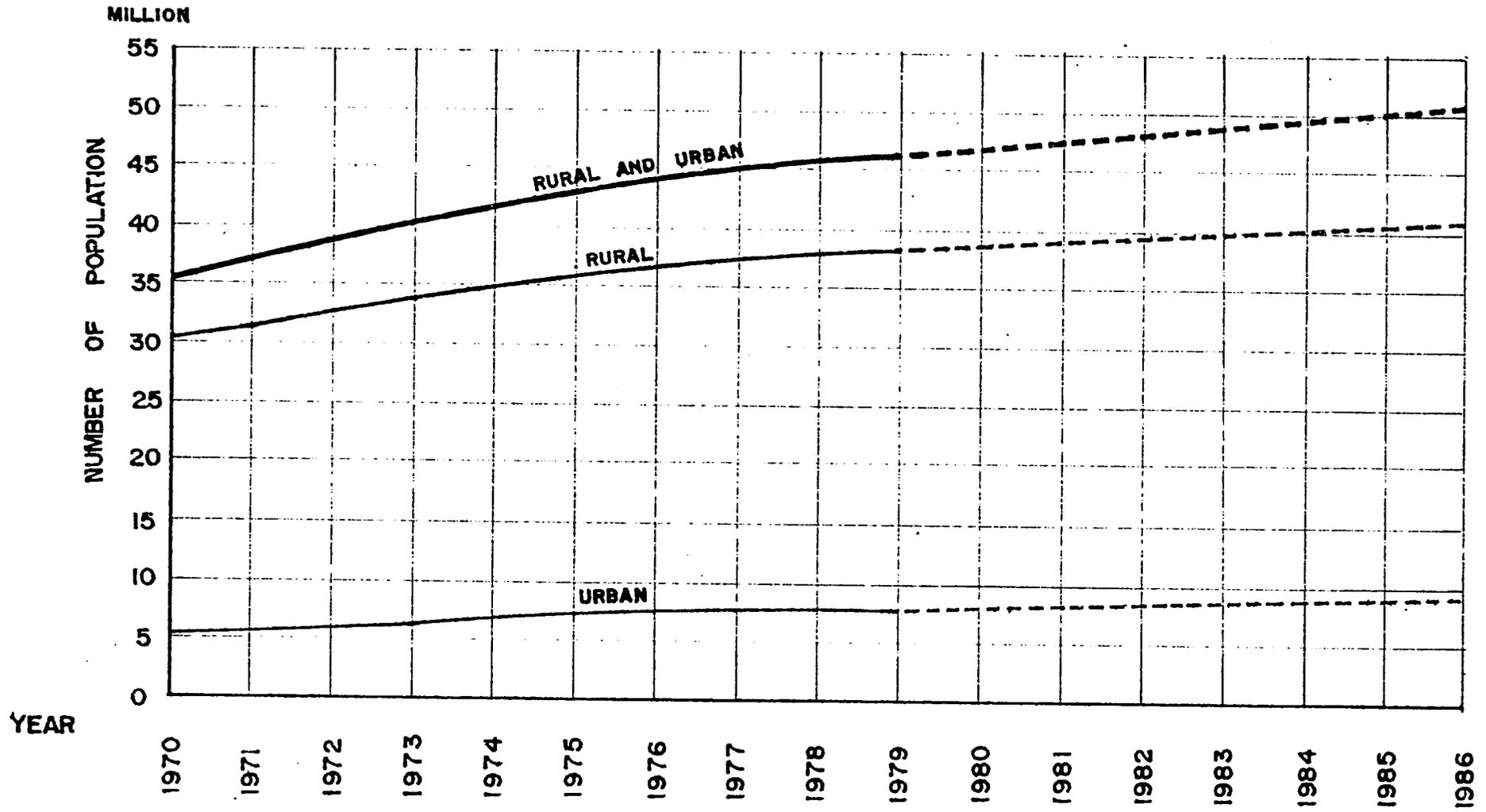
During the decade between 1965 and 1975, Thailand's population growth rate gradually increased which peaked at about 3% per annum. The total population of the country at the end of such period stood at 42 million, which 14% of its amount or about 6 million resided in urban areas.

By 1980, the overall growth rate declined to about 2.4 percent per annum with the total population at 47 million and approximately one-fifth of the total population lives in urban areas. The urban population has been growing about 5 percent a year during the past two decades, compare to a rural growth rate of around 2.5 percent per annum. Relatively good economic performance, low rural densities and the availability of new farm land have contributed to the moderate rate of urbanization. The urban growth rate is likely to accelerate during the 1980's due to expansion of the labor force as a result of earlier high population growth rates and the diminishing supply of unoccupied agricultural land.

Bangkok Metropolis thoroughly dominates the Thai urban sector. Its 5.2 million residents account for just over 62 percent of Thailand's urban population and 10 percent of the national populace.

FIGURE I

THAILAND'S POPULATION TREND



3. Pattern of Income Distribution

The pattern of income distribution in Thailand has always shown a wide range of disparity between the urban and rural sector and between the various geographical regions and towns. As summarized in Table 1 the degree of income disparity between 1968/1969 and 1975/1976 socio-economic surveys showed signs of narrowing down with only north-eastern urban households being worse off. While the average Bangkok household earned 2.5 times of the national average and 1.33 times of the national urban average in 1968/1969 these narrowed to 1.78 and 1.02 times respectively in 1975/1976.

TABLE 1 Household Total Income as Percentage of National Average
(in percent)

	<u>Year 1968/1969</u>		<u>Year 1975/1976</u>	
	Regional	Urban	Regional	Urban
Northeast	73	109	78	92
North	78	89	78	97
South	83	100	94	104
Central	120	102	117	108
Bangkok	248	133	178	102 ^(a)
Whole Kingdom	100	100	100	100

(a) Includes three additional provinces which are poorer and more rural. Therefore, the drop should not be as drastic as shown

Source: Oey Astra Meesook, "Income, Consumption and Poverty in Thailand", World Bank Working Paper No. 364, 1979 (data obtained from socio-economic surveys conducted by National Statistical Office)

So far as the pattern of income distribution within each urban area itself is concerned, as might be expected, in Bangkok the poorest one-fifth of the population in 1975/1976 earned only 10 percent of the total income while the top one-fifth earned 36 percent. The situation is generally even worse-off for urban households in the various regions as can be seen in Table 2.

TABLE 2 Income Distribution of Urban Households by Region,
1975/1976

Household Distribution	Cumulative Household Income Share				
	Bangkok	Central	North	Northeast	South
20	10	8	8	7	8
40	24	22	22	19	21
60	41	41	39	35	35
80	64	62	62	59	57
100	100	100	100	100	100

Source: National Statistical Office, Socio-Economic Survey, 1975/1976

Average household incomes in urban areas were 2.17 times greater than in rural areas in 1975-1976 according to data from the Government's socio-economic survey. The average income for urban households in Bangkok and the surrounding Central Region was 9% higher than for urban households in the three peripheral regions. The World Bank analyses of socio-economic surveys conducted by the Government indicate that the percentage of the urban population with incomes below

the estimated absolute poverty level (US \$ 148 per capita in 1975-1976) in each region was as shown in Table 3

TABLE 3

<u>Region</u>	<u>1968-1969</u>	<u>1975-1976</u>
Northeast	24%	20%
North	19%	18%
South	24%	22%
Central	14%	12%
Bangkok	11%	12%
Whole Kingdom		
Urban	16%	14%
Rural	43%	35%

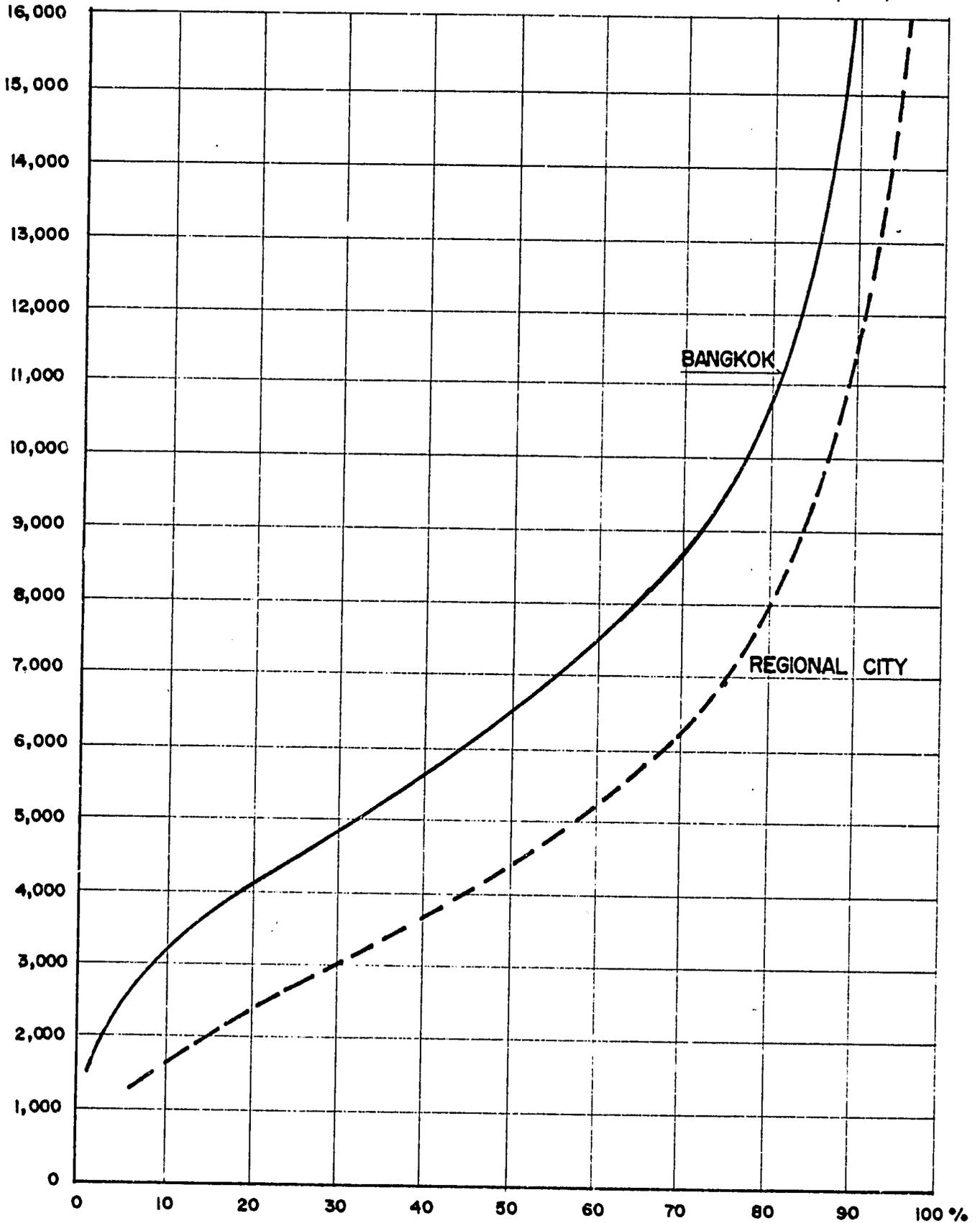
Urban poverty is proportionately most severe in the three peripheral regions. However, even though a smaller percentage of Bangkok's population is impoverished, the capital still accounted for about 54% of Thailand's total urban poverty population in 1975-1976.

Figure 2 shows the income distribution in Thailand's urbanized areas.

FIGURE 2
THAILAND
INCOME DISTRIBUTION
IN
URBANIZED AREAS
(1981)

BAHT / MONTH

1 US \$ = B 23



II. SHELTER SECTOR CHARACTERISTICS

1. Human Settlement Pattern

Although on average, urban population growth has been increasing at a considerably higher level than the national rate, the growth rate of various urban centers are by no means even. As shown in Table 4, growth rate of the largest cities listed varied enormously.

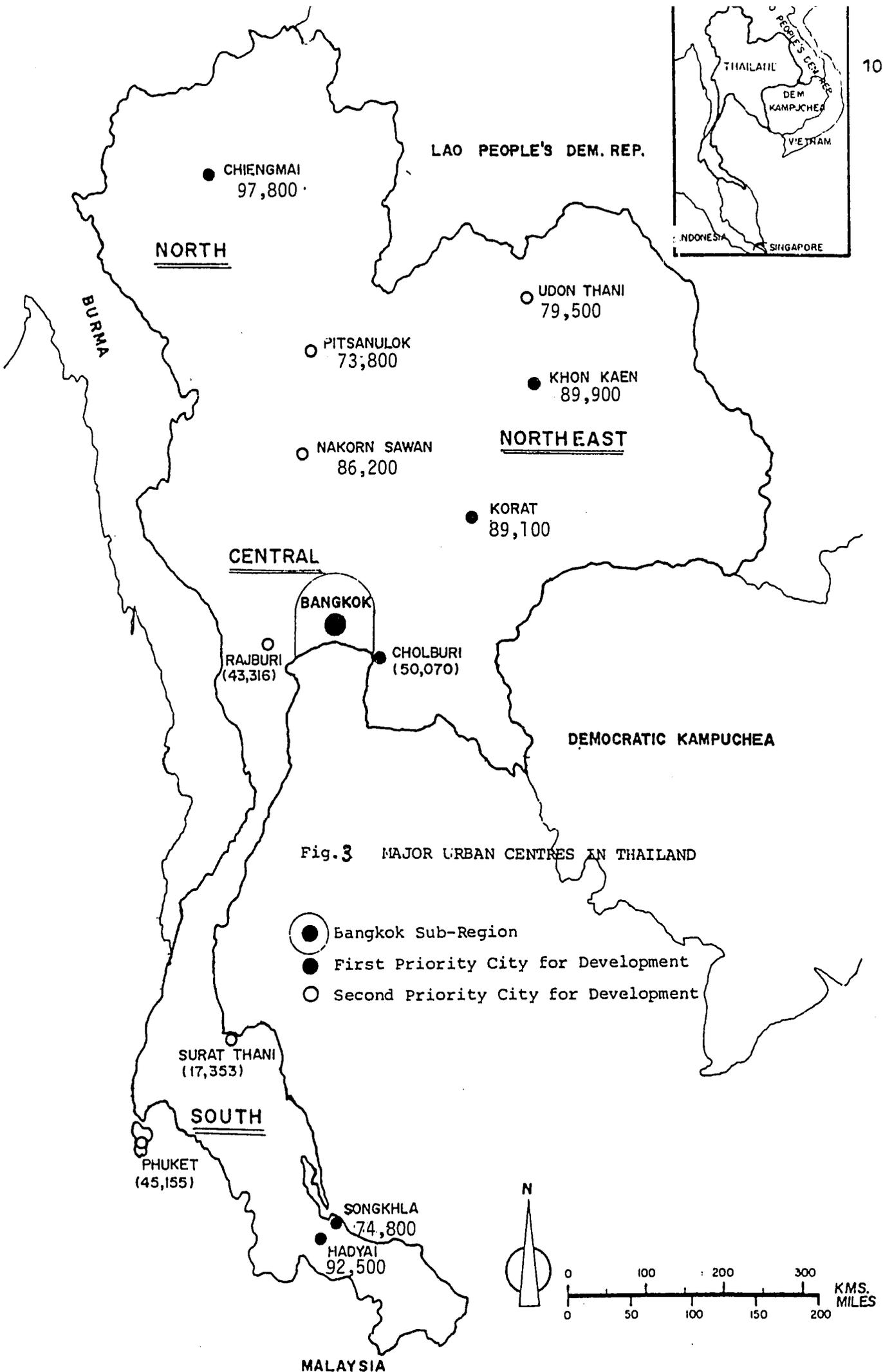
TABLE 4 Population Growth Trend of Major Cities

Urban Areas	Population	
	Number ^(a) (1979)	Annual Growth (%) (1973-1979)
1. Bangkok Metropolis	4,999,500	4.33
2. Chiangmai	97,800	0.28
3. Had-yai	92,500	9.51 ^(b)
4. Khon Kaen	89,900	6.60
5. Korat	89,100	1.97
6. Nakorn Sawan	86,200	11.28 ^(b)
7. Udorn Thani	79,500	2.13
8. Songkla	74,800	6.87
9. Phitsanulok	73,800	0.28
10. Nakorn Srithammarat	65,200	4.72

Source: Department of Local Administration, Ministry of Interior

Note: (a) Population in municipal areas only, if inclusive of urban peripheral growth, cities with restrictive municipal land areas such as Chiangmai and Korat would have population of some 130,000 and 100,000 respectively.

(b) Inflated figures due to expansion of municipal boundaries.



In all, Thailand has 120 municipalities of varying status. As defined by the 1983 Municipality Act a "city municipality" is one which contains over 50,000 people with a density of over 3,000 persons per square kilometer, a "town municipality" is one which has a population size of over 10,000 with at least the same settlement density as a city municipality, while a "tambol (district) municipality" is one which is permitted to be flexibly defined.

Nevertheless, the general trend of urbanization had been such that by 1976 three quarters of all urban places were in the 10,000-50,000 size classes, while in 1947 three quarters were in the class below 10,000.

The dominance of Bangkok over other urban centers is overwhelming and is showing no sign of abatement. In 1947, 45 percent of urban population lives in Bangkok and in 1980 this became 62 percent or 5.2 million. Bangkok's population growth has maintained a high level throughout the population boom period reaching a height of 5.3 percent annual growth in 1975 and slowed down in concert with the overall population trend to about 3 percent in 1980. Today Bangkok is about 40 times larger than the next largest urban place.

With only 10 percent of the country's population, Bangkok's annual Gross Regional Product (GRP) contribution is some 27 percent. Virtually the total "modern" industrial sector is located in Bangkok or its environs. As a capital city, it is the seat of the monarchy, it contains a highly centralized bureaucracy, it offers the best in educational cultural amenities and the most complete range of physical and social

infrastructure. Little doubt then that the commercial, industrial and informal sector should thrive and attracting more and more investment within Bangkok's area of influence. Despite explicit government policy to reverse this trend, private sector investment initiative are still almost always ending up in Bangkok. Because Bangkok is such an important economic power-house of the country, any measure to enforce employment growth away from Bangkok risks causing adverse impact on the economy as a whole and may never be politically acceptable.

2. Housing Condition

It is normally assumed that Thailand has no housing shortage- current figures shows that country's population are housed in 7.5 million units with per household size of 6.3 but the quality of those housing stock however does indicate a degree of housing problem.

2.1 Rural Housing

With an average monthly income of 1,200 baht most of the rural families are home-owners either nuclear-family home-owner or extended-family home-owner. Regardless of size, housing quality is not different since almost all are wooden with galvanized-iron sheet or thatched roof house. Dwellings are 2 stories with multipurpose area on ground floor and sleep on the upper floor. A house can be built completely within 2 weeks by mutual help.

In rural area housing is generally given a lower priority in comparison with say scarcity of water, land for agriculture, education

or health problems. In brief, the immediate problem of rural housing is the availability of local and inexpensive construction materials.

2.2 Urban Housing

In the urban area, those with monthly income of 120,000 baht can provide themselves land and contractor-built houses or obtain either conventional dwellings or town-houses within the city developed by private sector housing market. The medium groups with monthly income between 6,000 to 12,000 baht can still rely on either conventional land and house on the fringe of the city or shop-house in town while some still live in rental dwelling. The least affluent ones must rely on their own resources, seek older and inexpensive housing and accept crowded slum or squatter conditions. In slum and squatter areas, dwellings are built of indigenous or reused materials mostly by dwelling themselves and generally inadequately serviced by all necessary facilities and utilities.

In brief, urban housing problems in Thailand are scarcity of affordable land, inadequate supply of resources for low and middle income housing development including services of necessary public utilities and facilities.

3. Housing Demand and Housing Stock

As it is said of all 47.5 million people who are housed in 7.5 million units, about 8.4 million people or 17.6 percent of the total are in urban areas. About 62% or 5.2 million of the urban population are in Bangkok, the capital and the largest city while the rest 3.2 million

live in the other 71 regional cities. Estimated from the urban population growth rate at 2 per year the total housing demand for the next five year (1982-1986) is 234,000 units, of which 149,000 units are for Bangkok population.

As other developing countries, the housing problem of the country mostly face the capital city, say, Bangkok where is the center of growth, economic and population.

TABLE 5 Estimated Housing Demand

Area	Pop. in 1981 (mill)	Increased Pop. bet. 1981-1986 (mill)	Housing Demand
Rural	39.1	3.2	511,000
Urban excl. BMA	3.2	0.5	85,000
BMA	5.2	0.9	149,000
Total	47.5	4.6	745,000

Remark Household size: 6.28 pers/hh. in rural
5.5 pers/hh. in urban
6.27 pers/hh. in BMA

Source: Department of Population Studies

4. Urban Housing Supply

The housing supply system in the urban areas can be considered by types of producers as follows:

4.1 Public Housing

Although the government built housing for the general public have had a long history in Thailand, it was only since the establishment of the National Housing Authority (NHA) in 1973 that the volume of supply became significant. During the years prior to the establishment of NHA only 17,000 units were built by the government, but since 1974 to 1981 about 45,000 units have been developed. Housing supplied by the government amounted to approximately 17-18% of the total housing stock, in various types of housing such as rental flats row houses, detached and single houses, mostly for the low-income and middle income people. According to the Five Year Development Plan (1982-1986) NHA will speed up to produce 10,000 units per year. However, this can serve only one fourth of the demand.

4.2 Private Housing

Since the period of 1960's, private developers have played important role in housing market but those for upper-middle and high income group only. Early, they had developed serviced land for purchase and hire-purchase, rental apartments and shop-house. Land with house has been popular for the last 10 years. At present it is known that there is about 200 developers serving in housing market with production of 60,000 housing units in total. Especially for last 2 years, condominium about 10,000 units is underconstruction, is newly introduced to the market.

4.3 Popular Housing

The largest share of the housing market in Thailand is the popular sector. Only very high income people can provide themselves house on serviced land with financing by institutional financier or by their own saving, while the very low-income people earning less than the average 50th percentile of income distribution have to rely on the market supply of rental housing or lands on which to build their own low standard shelter-so called "slum" or to house on illegal land as squatters. It is identified 410 slums areas consisting 70,000 units of dwelling throughout the Bangkok Metropolitan Area of which squatter housing are about 10,000 units.

5. Land Availability and Tenure

It is found that within 1,568 km² of Bangkok Metropolis about 53 percent - 800 km² are still in agriculture use, while the rest are either already built-up or left vacant. The vacant land within and around the built-up area amount to 338 km². Assuming about 12,000 person per km², this land would easily accomodate and additional population of a million or almost double the current metropolitan population size to nearly 10 million

In rural area the percentage of households owning their lands and shelters are much more than those of Bangkok. The problem of urban land in Bangkok is not the problem of availability of vacant land but the tenure problem. The most problematic area of concern lies with

squatter and legal slum housing - the former being illegal tenants who need to be near their place of work but could not pay any land cost, while the latter has tenure rights but often only on year to year basis whose landlords can revoke the arrangement with little notice. Most slums settle on rental lands from the owners - 70 percent of which belong to private and 30 percent to public agency land-lords such as Crown Property Bureau, Port Authority of Thailand.

6. Building Materials for Housing Construction in Thailand

Practically, nearly all building materials used in housing construction in Thailand are produced or processed locally. That which is imported (mainly some types of electrical equipment, appliances and heavy machinery, is readily available through local wholesalers.

Summary list of materials

Locally produced materials

- Crushed stone
- Gypsum
- Clay Brick
- Iron ore
- Lime
- Cement
- Asbestos cement product
- Pre-cast concrete products
- Sheet glass

- Brick and tile products
- Timber
- Plywood
- Particle board
- Asphalt
- Reinforcing steel
- Steel pipe and tube

Imported materials

- Raw asbestos
- Special cement grades
- Steel sections/shapes
- Soda ash
- Glues, resins, adhesives (for paints and varnishes)
- Plastics
- Electrical equipment
- Heavy machinery
- Appliances

At present most of those locally produced materials are not modular coordinated, but major producers, when approached, reassured that modular production can be achieved without much difficulty, provided that adequate demand and continuity in consumption prevails. One major building material, wood, is decreasing rapidly in supply, and substitutes will have to be developed for doors, windows, jams, frames and trims.

7. Housing Construction

House construction is basically of wood, concrete, or a combination of both. Housing types fall into variations of several categories: high and medium-rise apartments, shop-house blocks, multiple low-rise dwellings and single detached houses.

High and medium-rise apartments range in size from fairly luxurious to quite minimum. All are built of reinforced concrete frame and floor slab with light brick, concrete block, hollow clay tile or wood in-fill for walls and partitions. These heavy structures require footing founded on mostly pre-stressed concrete piles because of the low bearing capacity of the soil

Shop-house blocks, construction is similar to high and medium-rise apartments.

Multiple low-rise dwellings, these are mostly duplex units, but some are row houses. Construction is usually wood and concrete frame, set on wood or concrete piles.

The most desired type of house construction is the single detached unit. Due to inflated land costs, these units are relatively expensive. Construction of this type is similar to multiple low-rise dwellings.

8. Construction System in Thailand

Public Sector Developer: As the biggest developer in the Country the government has included housing among its projects. Up to the present, no serious attempt has been made to consider industrialized methods of construction, and practically nearly all projects have been done in the conventional method.

Private Sector Developer: Housing construction by private developers ranges from high and medium income houses and apartments to shop-houses and a small portion of low-cost housing. In the main, the conventional, labor-intensive method was adopted. Only recently some attempts have been made to introduce industrialized methods, with some success. However, due to lack of continuity in building programs, progress in development of industrialization is still limited.

Contractors: As mainly the conventional method of construction was employed in Thailand, local contractors have few, if any, experience in industrialized construction. A few major contractors own or have access to high capacity hauling equipment which can be utilized in assembling prefabricated components. What is still to be developed on the building contractors' part, if industrialization of building is to be introduced in Thailand, is the managerial and operating abilities in systemized operations.

Building-Component Producers: At present there are about 20 firms engaged in the production of systemized components in Thailand. Among these, 6 are producing complete systems; the rest limit their output to only floor system components which are not always compatible.

The six complete systems being produced are mainly for 2 storey structures such as detached and semi-detached houses. Only three firms, produced a system which was employed successfully in large scale high and medium-rise buildings.

Labor: The construction labor situation in Thailand could be examined in two separate categories:

Skilled Labor: Skilled labor in construction, as in other fields, is in short supply. Being labor-intensive in nature, construction calls for recruitment of skilled personnel in proportion to the ever-increasing projects. Due to inadequate training programs and overdemand for skilled help, standard of performance is declining while wages are ever-rising.

Unskilled Labor: Still strongly seasonal in nature, unskilled labor in construction fluctuates in quantity, wage ranges and standard of performance.

9. Infrastructure

NHA's project management generally require close coordination between itself and several other government agencies such as Metropolitan Electricity Authority (MEA), Metropolitan Water Works Authority (MWWA), Bangkok Metropolitan Administration (BMA), Provincial Electricity Authority (PEA), Provincial Water Work Authority (PWWA), and Local Municipalities etc. which would provide complementary services and be responsible for recurrent functions.

In addition to the responsibility for completing the designs of housing project components and supervising construction which will be done by contractors, NHA is also responsible for designing and supervising of the on-site and off-site infrastructure. Designs for off-site infrastructure and utilities will be reviewed by the relevant authorities as indicated in Table 6 . The MEA and PEA will install the off-plot electrical systems in the metropolitan area and regional cities, respectively, and occasionally BMA or Local Municipalities will construct the road linking the projects to the existing off-project or off-site roads. Generally, water supply system designed by the NHA and approved by MWWA or PWWA will be included in the NHA contracts. Since most of the NHA's projects are beyond the effective function of the public water network the artesian wells are being used as the substitutes. After an initial period of operation by NHA, the water supply system will be turned over to MWWA or PWWA.

TABLE 6 Responsibility for Administrative Functions

Administrative Functions	NHA	MEA or PEA	MWWA or PWWA	BMA or Local Municipalities
<u>Design, Contracting, Construction and Supervision</u>				
Site Development & Structure	●			
Electrical System	○	●		
Off-Site Roads	○			●
Water Supply System	●		○	
<u>Operation and Maintenance</u>				
Off-Site Roads	○			●
Flood Protection & On-Site Park	●			
On-Site Roads & Drains	●			
Water Supply System	● (1)			
Sewerage	●			○
Electricity		●		
Garbage Disposal				●

● Primary responsibility

○ Secondary responsibility or input

(1) for some initial period and it will be transferred to MWWA or PWWA later

III. BRIEF DESCRIPTION OF AGENCY AND ITS
PRINCIPAL FUNCTIONS

1. General

Before 1973, there were four existing agencies concerned with public housing in Thailand, the Housing Bureau, the Housing Division under the control of the Ministry of Interior, the Slum Clearance Office under the control of the Bangkok Municipality, and the Housing Welfare Bank under the control of the Ministry of Finance. The National Housing Authority (NHA) was formed in 1973 by amalgamating four existing agencies mentioned earlier. NHA is a semi-autonomous government enterprise responsible to a Cabinet-appointed Board of Directors under the Ministry of Interior and managed by a Governor appointed by the Board. NHA's organizational structure and staffing levels are shown in Fig. 4 and Table 7, respectively.

The Office of Policy and Planning is responsible for developing NHA's policies, programmatic targets and broad guidelines for specific projects.

The Research and Construction Department, which accounts for almost 40% of NHA's staff, designs and develops projects. There are currently five project teams in the department. Because of its substantial technical staff, the department make relatively little use of consultants for either design or supervision.

Completed projects are turned over to the Estate Management Department, which is responsible for allocations as well as management of the estates. The Department has offices in 13 estates in Bangkok as well as area offices in Regional cities and as Chiang Mai, Hat Yai, Nakorn Ratchasima and Chon Buri etc.

The Slum Upgrading Office is responsible for implementing the slum improvement program.

The Finance Department is responsible for implementing the NHA's financial policy which covers budgetary control, financial system, expenditure program, acquisition of capital sources, loan acquisition processes, accounting of income and expenditure, compilation of accounts and budgets, collection of rentals and sale prices and periodic examination of NHA's financial status etc.

FIGURE 4 National Housing Authority Organizational Structure

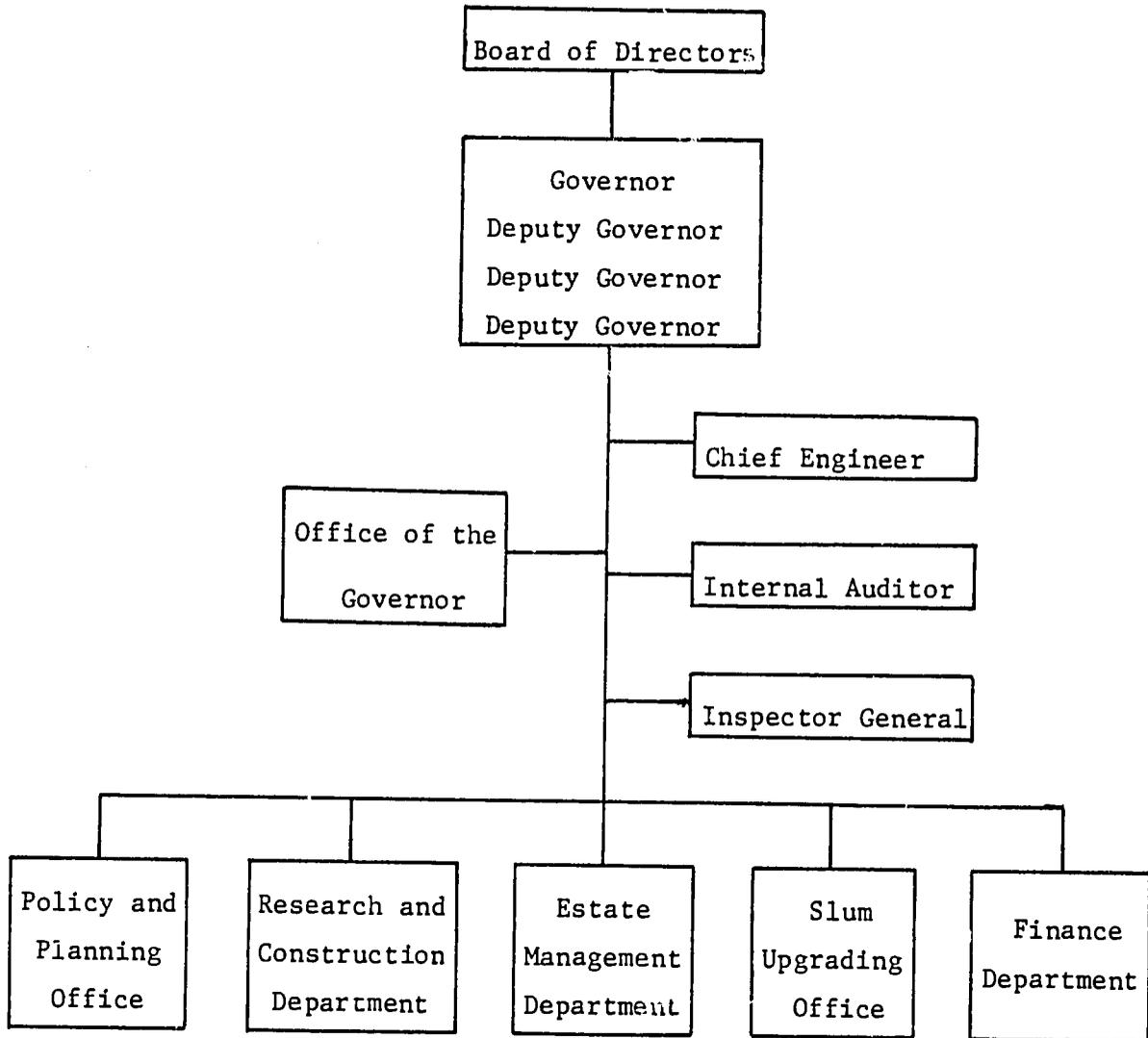


TABLE 7 National Housing Authority Staffing (Permanent Staff - 1982)

<u>Grade</u>	<u>Administrative & Legal</u>	<u>Engineering & Architecture</u>	<u>Finance & Audit</u>	<u>Policy Planning & Economics</u>	<u>Typing & Clerical</u>	<u>Laborers & Technicians</u>	<u>Total</u>
Senior Management	5	2	2				9
Middle Management	18	10	7	5			40
Technical	53	86	52	37			228
Junior Technical	75	102	98	35			310
Support	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>445</u>	<u>507</u>	<u>952</u>
Total	<u>151</u>	<u>200</u>	<u>159</u>	<u>77</u>	<u>445</u>	<u>507</u>	<u>1,539</u>

2. National Housing Authority : Policies and Programs

As experienced elsewhere in the world, the provision of housing for the low-income people is the responsibility of the government or its agencies and could not be successfully done by private enterprises because low-income people are not able to pay sufficient rent or hire-purchase rates to induce capital investments from the private sector in comparison with other business.

Summary of the NHA's objectives as specified in the organizing law are:

1. To provide housing for hire, hire-purchase, or purchase for the people
2. To provide financial assistance for the people who want to acquire their own housing or persons who wants to provide housing for hire, hire-purchase, or purchase for the people.
3. To engage in building construction or land procurement business.

According to the above mentioned purposes, NHA is authorized to carry on the following activities:

- a. To build, purchase, sell, rent, hire, hire-purchase, borrow, lend, exchange, transfer, hold proprietary right or right of ownership, or manage any property.
- b. To provide financial sources or guarantee for loans for the people who want to own housing or who want to provide housing for hire, hire-purchase, or purchase.

c. To procure land and construction materials for building construction.

d. To clear or improve slums for change or development to be housing.

e. To raise domestic or foreign loans or loans from international organizations.

f. To cooperate or incorporate itself with other persons for the benefit of NHA, including participation with limited partnerships or limited companies or juristic entities for the purposes of sale, purchase of land, providing of housing or providing of financial sources or guarantees for loans.

g. To engage in other activities which are related to or support the purposes of NHA.

The NHA, the only Thai government agency who is responsible for providing rental and hire-purchase housing for low-income families. During the mid-1970's NHA's program emphasized conventional apartments and detached and semi-detached units which were heavily subsidized. The program for 1976-1980 was far too ambitious for NHA's capabilities, calling for 120,000 units (24,000 units of housing per annum) in Bangkok, and required substantial Government subsidies. Households with monthly incomes of US \$ 75-150 paid only 50% of development costs with an 8% interest charge, while charges to households with monthly income of US \$ 75 or less were limited to a 6% interest charge on development costs. Within 2 year after 32,000 units were completed, the government suspended the program because of the large amount of increasing subsidies necessary to sustain it.

After a year of discussions and debates on NHA new policy, in 1978 a three years program (1979-1981) which was somewhat a compromised one between the governments welfare policy and the NHA's self-financed concept was finally approved by the government. The program called for US \$ 75 million subsidy for total 50,756 units which comprised of fully subsidized-rental apartment, sites and services projects and slum upgrading projects.

Project	No. of Units	Subsidy (mill. \$)
1. Rental apartment	5,596	28 ⁽¹⁾
2. Sites and Services	19,160	37 ⁽²⁾
3. Slum upgrading	<u>26,000</u>	<u>10</u> ⁽³⁾
	<u>50,756</u>	<u>75</u>

Note: (1) 100% subsidy or about US \$ 5,000/unit

(2) US \$ 2,100/unit subsidy for infrastructure and facilities

(3) US \$ 400/unit subsidy for infrastructure and facilities

Under this program about 36,000 units are being produced and are expected to be completed in 1982. It has been found that the construction cost of a rental apartment was raised up to about 7,000 \$ whereas, however, the subsidized infrastructure and facilities cost of sites and services projects are less than the estimation as it is only US \$ 750/unit.

Not only the low and middle income housing projects, the NHA was requested by government agencies such as police department,

ministry of defence and ministry of interior to develop housing for government officials. In this category the NHA would receive about 4% of the investment cost as the operation and management fee. At present the NHA has completed approximately 8,000 units for government officials.

Since 1977 the number of completed housing for low and middle income, government officials and slum upgrading projects have been accomplished by the NHA approximately around 80,000 units.

3. NHA : Implementation Program (1982-1986)

NHA implementation program during 1982-1986 is determined by the resources that NHA can procure, i.e., quantity of suitable land, capital, existing personnel and administrative capability etc.

During the 5 years period, NHA has planned to develop a total of 42,500 units of sites and services schemes in the Bangkok territory and some 7,500 units in the provincial areas (about 300 units each for 25 provinces). In addition, a total of 30,000 slum families will be in the improvement scheme.

TABLE 8 Estimated Budget for 1982-1986 Program

<u>Scheme</u>	<u>No. of Unit</u>	<u>Estimated Budget (Mill. US \$)</u>
1. Bangkok Sites and Services	42,500	315.5
2. Provincial Sites and Services	7,500	39.00
3. Slum Improvement	30,000	27.60
4. Rural Housing	<u>Demonstration</u>	<u>2.2</u>
Total	<u>80,000</u>	<u>384.3</u>

In the rural areas, the NHA at this stage has not have the capacity to implement the rural housing scheme yet, therefore during this 5 years plan will be the preparation stage for NHA. The operation plan has been set up as follows:

1. NHA will study the rural housing in terms of quantity, quality, problems related to housing, capacity and affordability of people in rural areas throughout the whole country.

2. NHA will develop some demonstration project both in existing settlement and planned settlement in order to find the appropriate solution for the rural housing development.

3. NHA will set up the rural housing policy, implementation program for the next 5 years plan.

National Housing Authority
The Budget for the Year 1982 - 1983

	1982	1983	Remark
<u>Revenue</u>			
- Rent	47.285	55.551	
- Hire Purchase	514.463	525.142	
- Down Payment	28.466	64.593	
- Receipt from Special Project	5.193	-	
- Receipt from Governmental Agency Project	17.926	7.797	
- Others	48.673	49.217	
Total	<u>662.006</u>	<u>702.300</u>	
<u>Expense</u>			
- Operating Expense	258.296	334.194	
- Project Investment Expendi- ture	1,754.034	1,223.536	
- Non-project Investment Expenditure	29.890	11.621	
- Repayment of Loan and Interest	467.779	481.928	
Total	<u>2,509.999</u>	<u>2,051.279</u>	

NHA
Income Statement 1982, 1983
(ended 30 Sept.)

	(Million:Baht)	
	1982	1983
<u>Revenue</u>		
- Rent	33.6	38.9
- Hire Purchase Interest	-	366.0
- Government Subsidies	131.5	-
- Insurance	-	7.4
- Profit from Sale of Hire Purchase Properties	192.1	30.1
- Service	38.9	71.1
- Water	-	17.1
- Net Receipt from Agency Work	4.0	7.8
- Miscellaneous	81.2	40.8
	<u>481.3</u>	<u>579.2</u>
<u>Expenses</u>		
- Salaries and Wages	122.8	166.5
- Operating Expenses	105.4	199.6
- Overhead Cost Capitalized to Project Cost	(42.6)	(48.0)
	<u>185.6</u>	<u>318.1</u>
Operating Surplus	295.7	261.1
- Depreciation	(42.8)	(44.3)
- Interest Expense	(229.3)	(406.1)
- Interest Capitalized to Project Cost	-	103.0
- Interest Subsidy	-	157.4
Net Profit	<u>23.6</u>	<u>71.1</u>

ANALYSIS AND DEFINITION OF THE APPROPRIATE ROLE OF
THE PUBLIC AND PRIVATE SECTORS

The Role of Private Sector in Housing Construction Industry in Thailand:

Like many other countries, the provision of housing for low-income earners could not be successfully done by private enterprises since low-income people are not able to pay sufficient rent or hire-purchase rates to induce capital investments from the private sector in comparison with other types of business.

The private housing projects have been undertaken by a few land owners in the last 20 years period as pilot projects on hire-purchase sub-divisions of land, Economic Village and Pornsawang Nives Village are the pioneers in private housing industry. Patawikorn Village, Friendship Village, Saeri Village, Olan Village, Muangtong Nives, Chor. Amornphant Nives, and Saena Nives etc. are among the leading on-going private housing projects.

Private housing industry shares the government's burden by serving housing demand of high, medium-high, and medium income households. Nevertheless, the prices are still very high because land values, especially metropolitan land values have been fairly high. On the average, the cost of land represent about 55-60% of cost of housing and the cost of construction materials is rising with no sign of slowing down (see Table 1). The monthly instalments of these housing projects are rarely under 3,500

TABLE 1 Average Selling Price of Several Types of Buildings
Including Land

Unit : Baht/Bldg.
US \$ 1 = 23 Baht

<u>Year</u>	<u>Bangkok</u>	<u>Central</u>	<u>North</u>	<u>Northeast</u>	<u>South</u>	<u>Average</u>
1978	305,000	228,000	315,000	210,000	283,000	255,000
1979	361,000	281,000	390,000	263,000	388,000	319,000
1980	445,000	310,000	472,000	316,000	462,000	384,000
1981	501,000	355,000	523,000	363,000	512,000	430,000

Note: Types of Building Reckoned are Detached House, Row House, Townhouse, Duplex House, Shop House (Commercial Building)

TABLE 2 Average Selling Price of Land Only

Unit : Baht/M²

<u>Year</u>	<u>Bangkok</u>	<u>Central</u>	<u>North</u>	<u>Northeast</u>	<u>South</u>	<u>Average</u>
1978	510	342	325	332	625	427
1979	636	563	462	430	775	573
1980	737	685	552	547	925	690
1981	865	750	671	627	985	780

Source: Proceedings of the Seminar on Housing for Low-Income Groups in Urban Environment, Thailand Institute of Scientific and Technological Research, Bangkok 22-25 June 1982, Sponsored by Unesco.

Baht (US \$ 150), and some of them are as high as 8,000 Baht (US \$ 350). In both cases only high and medium-high income families can afford to pay.

Currently, the minimum cost of a small single story house on 200 M² of land located in one of the outlying suburbs of Bangkok ranges between 300,000 Baht (US \$ 13,000) and 460,000 Baht (US \$ 20,000). Somewhat larger houses on 320 M² to 400 M² of land, which was considered the minimum size ten years ago, are now considered luxurious and cost between 700,000 Baht (US \$ 30,000) and 1,000,000 Baht (US \$ 45,000). This means that the 20-25% down payment for a small suburban house is at least 60,000 Baht (US \$ 2,600), an amount which many newly married couples nowadays simply do not have at their disposal, and the monthly instalment of about 3,500 Baht (US \$ 150) to 5,000 Baht (US \$ 217) within about 12 years period, which is fairly high and the low-income families cannot afford to pay for it.

Characteristic, Status and Trend of Private Housing Sector in Thailand:

In the past, the private developers would initiate a certain amount of investment and development schemes, which after completion would present their products to customers. At present, the trend was shifted to build according to the demand or order of the clients. This could help solving the problem of heavy investment as well as to reduce the related expenditure of transferring land and house ownership. Some entrepreneurs have separated their companies into two firms. One firm takes care of land dividing and to build infrastructure to cope with the requirements of the Government's Regulation. The other firm deals only with the construction of houses.

TABLE 3 Number of Buildings Completed During 1978-1981

<u>Year</u>	<u>Bangkok</u>	<u>Central</u>	<u>North</u>	<u>Northeast</u>	<u>South</u>	<u>Total</u>	<u>Rate of Increase %</u>
1978	2,700	500	450	50	250	3,950	-
1979	4,400	480	510	120	390	5,900	+ 49.4
1980	4,200	350	470	160	570	5,750	- 2.5
1981	4,400	300	450	300	750	6,200	+ 7.8

TABLE 4 Number of Buildings Sold During 1978-1981

<u>Year</u>	<u>Bangkok</u>	<u>Central</u>	<u>North</u>	<u>Northeast</u>	<u>South</u>	<u>Total</u>	<u>Rate of Increase %</u>
1978	2,440	369	350	44	200	3,403	-
1979	4,055	407	422	82	374	5,340	57.0
1980	4,279	312	429	98	421	5,539	3.7
1981	4,450	350	470	150	580	6,000	8.3

TABLE 5 Number of Buildings Unsold in Each Year

<u>Year</u>	<u>Bangkok</u>	<u>Central</u>	<u>North</u>	<u>Northeast</u>	<u>South</u>	<u>Total</u>	<u>Rate of Increase %</u>
1978	260	131	100	6	50	547	-
1979	605	204	188	44	66	1,107	102.4
1980	526	242	229	106	215	1,318	19.1
1981	476	192	209	256	385	1,518	15.2

Source (For Table 3-5): Same Source as Table 1 and 2

Since the middle of 1979, activity in private housing sector has virtually come to standstill. The townhouse boom of recent years is definitely on the decline, while new shop-house construction is also dwindling. The decline is not a result of lesser demand. nevertheless, developers insist that there is a demand for about 15,000-25,000 new housing units annually, just in the middle-income group, large developers frequently aim for steeply rising investment costs and higher interest rates, developers say, are the main culprits for the current stagnation in private housing estate construction.

Then there is the problem of long-term financing. Thai commercial banks have supported many housing projects in the past, with an average of 6 to 12 years for repayment. Nowadays, nearly all bankers have imposed more restrictions on such long-term credits as well as interest rate. While the Government Housing Bank (GHB) is trying its best to provide financing for housing, its resources are not up to the gigantic task it faces; as a result, even if developers can obtain construction loans, they'll choose not to go into housings because they think buyers cannot afford to pay for them.

At this moment, it can be seen that a certain saturation has been reached in the traditional housing market. Developers confronted with this saturation are presented with two alternatives:

- (1) Shift their investment to other economics sectors which trend are more promising, or,
- (2) Try to find new markets by adjusting the price of their product.

Given the general trend and diversification of the economy of the Bangkok Metropolitan area, the first choice seems to be the most obvious and the one with the least financial risks. Some developers have selected however, the second alternative and are moving into the new market of luxury condominium. This market has also its limits and are require an easy access to large amount of capital, probably beyond the mean of the average developer.

Interrelationships Between Public and Private Sectors:

The purposes of the NHA's program concerning the private housing sector are as follows :

- (1) To cooperate with the private sector within the limitations of NHA authority to provide enough housing for public needs.
- (2) To encourage and promote investment by the private sector to build member cities and housing in accordance with the Government's Codes and Regulations.

Actually, since 1973 the year the NHA was established, there has been no significant achievement resulted from the cooperation between NHA and private sector. In 1977, some housing projects in the private sector were submitted to the NHA for promotional privileges, and the outcome of such activity was not as successful as it should be.

Recommended Approaches:

One possible additional field of action which is often abstractly advocated but never defined precisely, is the stimulation of

the private sector to provide the "right kind" of houses. It is not obvious that this stimulation role belongs to NHA, although it is certain that NHA will greatly benefit from a reactivated private sector as it will greatly reduce the size of the real client group. What are the means available to stimulate the formal private sector to expand its production toward lower income group? Or to be more specific, what could induce the private sector to put on the market land and house price between 100,000-200,000 Baht (US \$ 5,000-10,000)? Three types of complementary actions could be contemplated:

- (1) Adjustment of minimum legal urbanization and construction standards, in order to reduce the size of capital investment.
- (2) Adjustment of financial institutions requirement of practice so that smaller loans be routinely available, even if this mean imposing an additional fee to be paid by the borrower to take into account the higher overheads involved in loans of smaller amount.
- (3) To conduct convincing market research, build demonstration housing projects and disseminate results among private developer and builder to convince them that a market exist in lower income category and that a reasonable profit margin can be expected. This implies of course that a very strict costing and pricing procedure is used when building the demonstration project and that no hidden subsidy have been included to make the project look better.

NHA could possibly demonstrate that there is a market for lower price houses at lower standards and that financing is available for developer who cannot switch to luxurious house such as condominium.

If some private developers were moving into this part of the market, it would greatly reduce the present potential client group of NHA and it would make it possible to concentrate its efforts on the real low income groups.

This stimulation of the private market by NHA would be possible only if housing finance institutions are themselves ready to coordinate their lending rules with NHA policy in this matter.

THE RELATIONSHIP OF PROJECT AND PROGRAM DESIGN TO
INDIVIDUAL HOUSEHOLD INCOME AFFORDABILITY LEVELS.

Target Group Identification

According to the 1982-1986 NHA's program time span, policy on identification of a target group in each group will be based on total household income levels as a principle. Since income distribution of households in provincial areas is different from Bangkok Metropolis, it is then necessary to identify the consideration into 2 parts according to the following concepts:

a. Housing standard will be determined in compliance with actual affordability level of each income group. For households whose income are lower than the level that can possess housing in the hire-purchase manner, they will have an opportunity to receive support through the slum improvement project.

b. In every project, low income earners will have a greater proportion than those of other income levels because they suffer most in procuring dwelling units. For other income levels, it is necessary to provide some proportions in order to make such community a self-contained one in both the economic and social aspect, thus lending to cross-subsidy within the community.

c. Identification of various income levels will be based on percentile distribution defining that a household having income lower than the average percentile, i.e. 50th percentile are low income families

while those whose household income is higher than that level will be classified as medium and high income earners, respectively.

d. The target group, identified by percentile level, will be steady while the income level of the target group will increase every year according to the fact. For example, at 20th percentile level, in the first year of the program will be equal to Baht 4,000 per month, this income may increase to read Baht 4,500 per month in the second year. This is to be used to determine the affordability level during the program implementation.

The NHA's target group identification identified by income level for housing development projects in the year 1982 is shown in Table 6.

TABLE 6 Target Group Identification for Housing Development Projects
in the Year 1982

<u>Location</u>	<u>Target Group (Symbol)</u>	<u>(a) Income Level Baht/month</u>	<u>(b) Percentile %</u>
Bangkok	Low (A)	3,000-4,000	10-20
	Low (B)	4,001-5,000	21-35
	Low (C)	5,001-7,000	36-50
	Medium (D)	7,001-9,000	51-70
	High (E)	9,000 and up	71 and up
Provincial	Low (A)	2,500-3,000	20-30
	Low (B)	3,001-3,500	31-40
	Low (C)	3,501-4,500	41-50
	Medium (D)	4,501-6,500	51-70
	High (E)	6,500 and up	71 and up

(a) Subject to change every fiscal year according to household income distribution fact.

(b) Target group level, determined by percentile, will be constant through the program time span.

Affordability Levels

Another component which is worthwhile to be discussed is the upper limitation on the amount of investment for shelter in each target group (the so-called affordability). Affordability level specifies how much policy maker expect families will spend voluntarily on housing, in accordance with the 1982-1986 program, it is estimated that families will spend the average of 25% of household income on housing.

The tentative 25% figure comes partly from budget surveys but mostly it comes from wishful thinking, mimicking European and U.S. experience, and someone even says that it comes from IGNORANCE.

The affordability level is supposed to represent:

Total Expenditure on Housing
 . Household Income

where total expenditure on housing includes

- A - all contractual rent, mortgage and hire-purchase rates,
 including estate management charge
- B - all expenses for public services, taxes and insurance
- C - all expense for maintenance and investment in a house,
 its garden and furnishing

The Other Issues to be Discussed

Although we all have the idea of what income or budget of a household indicates, and propensity to pay for housing services, we are still left with some questions.

- Do we need figures of the gross income, or net income as the relevant measure for affordability?
- Do we need the income of the head of the household, presumably the one who will approach the housing finance institution, or should we refer to the total household income?
- Do we need to take into consideration potential income for the household by subletting part of his house?
- Do we need only his monthly income or should we take a longer period over which we investigate the borrower's affordability?
- Do we need a written document of the employer of the potential borrower in order to assess his affordability?
- Do we need to take into account a certain career and consequently a certain income development profile of the potential borrower?
- Fault with estimating "Ability to Pay"
- Ability to Pay VS Willingness to Pay
- Affordable VS Accessible

Technique in Relating Affordability to Project Design

During the past, there has been no easy and systematic way to relate all of the financial and physical variables in a project so that the impact of alternatives can be quickly assessed. Frequently,

the traditional project planning process has to be started by assuming or selecting a standard acceptable by the planner. Until 1980, the Bertaud's Model developed by Alain Bertaud, The World Bank's Consultant, has been introduced to the NHA's planning staff. At the first stage, the model was used as a tool to provide a quick cross check of the traditional project design consistency. The planning and designing of projects for low income settlements has no correct or incorrect solutions, final decision still require professional judgment.

The Bertaud's Model relates project parameters such as land cost, infrastructure + housing cost, densities and plot sizes to required monthly payments. Affordable monthly payments and mortgage terms determine the capital available on one side of the model while the unit costs of infrastructure, on plot structure and public facilities including circulation space, determine the capital needed on the other. The relating factor between the two sides of the model is the population density, the number of household per hectare converting the individual household contribution and the costs per plot to a total capital sum that has to be equated.

The model can help to answer types of questions concerning the project design as follows:

Affordability

How much can specific types of low-income households afford to pay for shelter, given their present and foreseeable incomes and specified conditions under which that shelter can be financed?

Financial Terms

How much will the amounts they can afford be changed if interest rates, recovery periods, or down payments are changed?

Plot and Housing Designs

What are the physical shelter options available to specific types of households within the expenditure they can afford?

What plot sizes are feasible?

What densities are implied?

What types and standard of infrastructure, community facilities and housing are feasible?

What locations are feasible for projects, given specified constraints on the land prices?

To what degree do individual project features have to be sacrificed in order to achieve improvements in other features and still maintain affordability? (For example, how much do plot sizes have to be reduced in order to incorporate higher standards of infrastructure or as the obverse of this, how much do infrastructure standard have to be reduced in order to achieve larger plots?)

To what extent do housing types have to be simplified in order to reduce the costs so that a preferred location on high-priced land is achieved?

Cost Recovery and Project Design

What mix of household types and shelter solutions can be incorporated in a project and still achieve affordability and cost recovery for the project as a whole?

The Bertaud's Model is composed of 7 elements or sub-models, but only 2 programs are employed in analysing the NHA's projects.

Program I: Can be used to analyze the consequences of change in the basic components of the projects which the model represent. It is versatile in the sense that it permits a project to be examined from a variety of points of view. Changes in individual project variable which can be expected to occur when other variable or set of variables are changed, can be identified. For example, the changes that can be expected in the capital investment that households of specific types can afford for housing if yearly interest rates, recovery periods and or down payments change.

Program III: Make it possible to examine the consequence of differential land pricing, pricing some types of land at market price, that is higher than actual costs, in order to charge prices below cost for other types of use and still cover overall project costs. One of the most relevant applications of this type of analysis will be in investigations of the potential for achieving cross-subsidies in order to make it feasible to include very low-income earners into the projects from which they would otherwise be excluded.

Background

In the late 70's, Alain Bertaud and his colleagues at the Planning and Development Collaborative International (PADCO) undertook the development of mathematical formulas for determining the costs and affordability of alternative housing designs. These formulas were organized into a set of convenient programs for inexpensive programmable calculators. The program set is now called The Bertaud's Model. Project designers can use the various programs to make basic decisions about site acquisition, the affordability of particular mixes of infrastructure, and on-plot construction.

Traditional Practices

For Traditional project planning, planners often begin with a data collection phase about current housing conditions, user housing needs, and their resources. Collected data is merged with housing agency information and a preliminary sketch plan is created. The designer's attention is largely on site planning, construction methods, and particularly on dwelling unit design if the project is not a sites and services project. The design process is one of continuously manipulating the spatial allocation of land, and the specifications for infrastructure according to code requirements and local construction practice.

Once the overall design is committed, a quantities take-off is done to find each project component's cost. These costs become the basis for determining the price to the client.

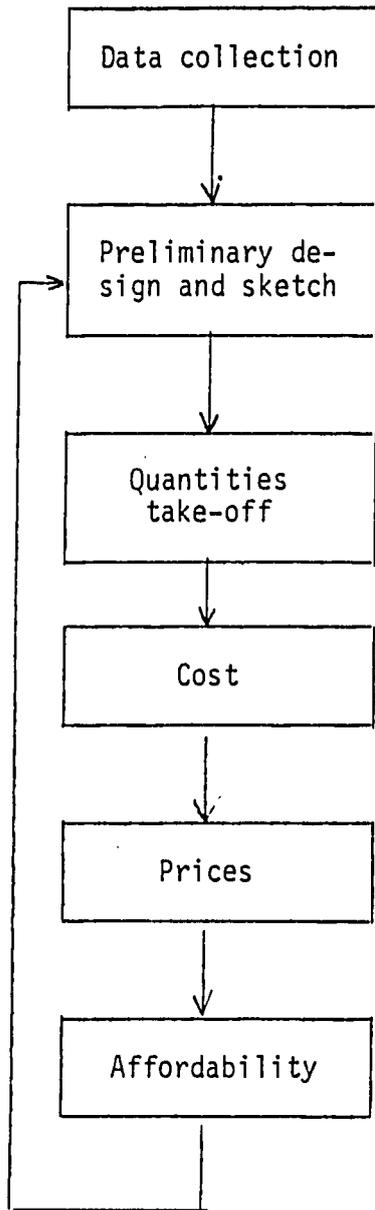
The Bertaud's Model

The Traditional process starts with a sketch plan to be priced while Bertaud starts with a definition of the maximum financial terms beneficiaries can pay and computes the density and plot size of what the sketch plan

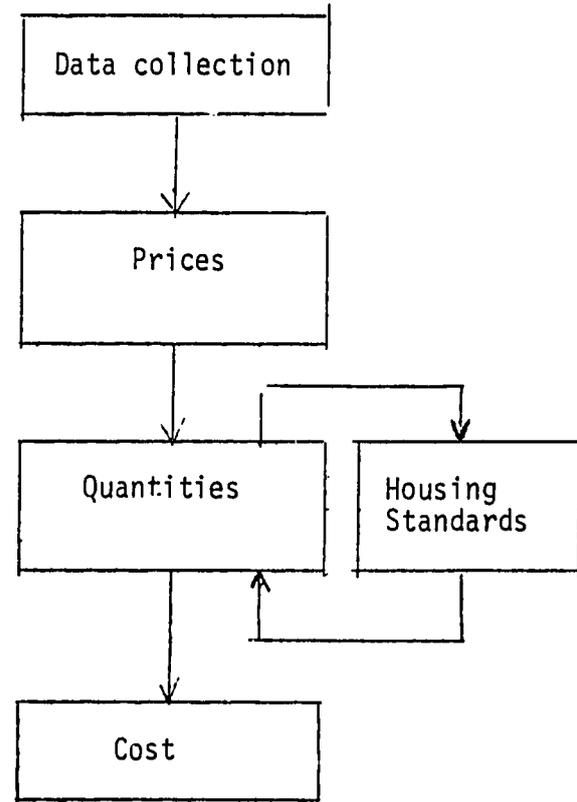
should generally be. Bertaud addresses the price question right off rather than at the conclusion of the design quantities - pricing phases. The model itself is simply an accounting mechanism to measure the design effects of changing finance, capital cost, e.g., cost of land, cost of infrastructure, cost of construction, and cost communal facilities etc. or household characteristics.

Most of the data collected and used in Bertaud process is market oriented and focuses on the family's alternatives in the overall housing system. Therefore, once prices have been established, the designer essentially manipulates infrastructure and land-use standards to obtain a satisfactory trade-off between financial and physical planning.

The "best" design depends on the client's needs and the project's objectives, it might be to maximize the amount of land in private ownership or to minimize the monthly mortgage payment families make.



Traditional Project Design Process



Bertaud Design Process

Using the Model

The Bertaud's model can be used in two ways:

First, it is a simple set of equations easily understood by policy makers. The model is based on the relationship of financial, cost, and land use parameters. The model between land use and cost within the constraints given by the financial parameters. It offers the designer a powerful decision aid, particularly in the initial design stage.

Secondly, the model can be used as a good vehicle for dialogue between planners. Today's projects tend to be designed and implemented by multi-disciplinary teams.

Model Components

The most widely-available version of the Bertaud's model has 7 programs. Program I and III will be explained briefly:

Program I

Program I is the most important and is used to assess the trade-off between the financial terms, design standards, and land use parameters of the design. It determines the plot size and density affordable to a specific income group given a monthly mortgage payment and other parameter such as financial variables, unit costs, and design standards.

Program III

Program III is used for calculating the number of plots of each size which can be designed into a project where values for Program I and the desired plot distribution are known. This program is particularly useful in determining if higher income groups within a project could cross-subsidize lower-income earners, thus allowing projects to reach lower-income groups while keeping the project self-financing.

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HOUSING FINANCE STUDY - THAILAND

By: Wasana Sinsatienporn

I. The Present Position of the Housing Finance in Thailand

The sequence of this summary is to describe briefly the housing finance picture in Thailand as we have found it:

1. The amount of housing finance from all sources in Thailand is small, about 2% of GDP in 1980. In comparison with this modest figure, private savings have been reported to be almost 20% of the GDP in the same year, suggesting that a larger proportion of savings would be applied to housing finance given the opportunity to do so.

2. Housing finance had been contributed by the following formal institutions at the end of 1980:

Government Housing Bank	฿ 4,790 million	33%
Commercial Banks	4,750 million	32%
National Housing Authority	1,800 million	12%
Finance Companies	1,260 million	8%
Credit Fonciers	1,100 million	7.5%
Life Insurance Companies	400 million	3%
Government Savings Bank	240 million	1.5%
Bangkok Cooperative Housing Society	470 million	3%
	฿ <u>14,810 million</u>	<u>100%</u>

And much of this finance was provided in recent years, particularly in the years of 1978 and 1979.

3. Disregarding the contribution of NHA, which is the "special case" in most areas of housing finance, the following sample statistics indicate the terms of housing finance that is being provided:

(i) the average length of a loan from all formal institutions is 10.5 years.

(ii) the average down payment is 31.9%.

(iii) the average interest charge is 16.2%.

4. The housing finance distribution is also a problem in Thailand. Some 88% of all housing finance provided by formal institutions is limited to the area of Greater Bangkok (which contains only 10% of the Kingdom's population). Of the remaining 12% that is available, nearly 10% is provided by commercial banks through their extensive network of branches.

And from the Household Survey, it is indicated that 76% of the housing finance provided by formal institutions in Bangkok went to families in the upper income group (those earning more than ฿7,000 per month) which contains some 30% of all families. The average income of borrowers for project houses in Bangkok in 1980 was found by the Bank of Thailand Survey to be ฿12,900 per month.

5. Specialist housing finance institutions, that is the Government Housing Bank (GHB) and the Credit Fonciers, have not shown themselves to be very successful when compared to the more general purpose finance institutions such as commercial banks and finance companies.

6. The institutions that are the foremost collectors of the domestic savings, the commercial banks, the finance companies and the Government Savings Bank, are not specialist housing finance institutions.

7. There are no special housing finance institutions organized and financed to provide loans to low income households.

II. The Proposals

To improve the position described above, the Ministry of Finance has proposed measures to:

- (1) increase the amount of finance available for housing loans.
- (2) encourage specialist housing finance institutions.
- (3) provide financial links between savings institutions and those that provide housing finance.
- (4) create specific low income housing finance institutions.
- (5) extend housing loans to the provinces.

The proposals can be briefly summarized as follows:

(1) The establishment of a Housing Council

This institution is needed to be the link between housing policy as established by the Cabinet and the many institutions, both public and private, that will collectively implement that policy.

(2) Changes to the Government Housing Bank

This institution will continue to be the Government's most important instrument for carrying out a housing finance policy. In particular, from the study, it should:

(2.1.) become a wholesaler of housing finance to other institutions and for this purpose it should greatly increase its access to additional sources of funds.

(2.2.) extend its operations throughout the country.

(2.3.) take over (slowly and over a period of time) the provision of housing finance on NHA's estates.

(2.4.) expand its technical services throughout the country.

(2.5.) widen the special "window" for small loans which are made at concessionary rates for the purpose of improvement, expansion or incremental construction of houses.

(2.6.) encourage other housing finance institutions by setting standards and by giving guarantees to those institutions that carry out the Government's policy.

(3) Investment in GHB by financial institutions should be increased

To enable GHB's lending program to expand, its Housing Bonds should be acceptable securities up to a specified percentage for the reserve funds of the financial institutions such as insurance companies and finance companies and that it should have access to the funds of the new Government Provident Fund.

(4) Changes to the National Housing Authority

The NHA is a major provider of housing finance (some 12% of the total provided by all institutions at the end of 1980) and although this activity was envisaged by the Decree establishing the NHA, it is now generally agreed that the role is undesirable and should be changed. From the study, GHB should take over the financing of NHA's estates. As an additional development function, the NHA should act as a developer for the low income Housing Co-operatives.

(5) Credit Foncier should be encouraged

The Credit Fonciers, which provide substantial amounts of long-term finance, should be encouraged to produce marketable financial instruments backed by the mortgages.

(6) An increase in the number of Housing Co-operatives

Following an additional study into how it should be done, with the help of a small central organization modest sized housing co-operatives should be set up, both in Bangkok and in the provincial towns. They will be groups of low and middle income people with a common purpose and

in the same location. The co-operatives will receive funds lent by GHB.

(7) General Recommendations

(7.1.) housing loans should be made with variable interest rates and annual revision should be done to prevent the obstruction of the flow of housing finance.

(7.2.) loans should be made for much longer periods than the present national average of 10.5 years. 20 and 25 year loans are familiar in other countries.

(7.3.) specific Savings for Loans schemes should be promoted.

(7.4.) low start mortgages should also be tried experimentally.

III. Other Matters

(1) Targets for the amount of publicly supported housing finance

The conclusions are that the targets should be:

For 1982-86	β 14,500 million
For 1987-91	β <u>21,800 million</u>
Total	β 36,300 million

If an allowance for inflation is made at 10% a year these figures increase to:

For 1982-86	β 19,600 million
For 1987-91	β <u>49,200 million</u>
Total	β 68,800 million

The provision of sums of this magnitude would give a lower income family access to housing finance that is now possessed by upper income families and would increase housing finance in the provinces by 50%.

(2) The Household Survey

According to the household survey in Bangkok and five secondary towns, evidence has been presented that there is demand for improved housing from members of all income groups. For low and middle income households, most of the financial resources of these groups came from informal sources. They nevertheless have proven capacity for savings, and much of their capacity is kept in the formal sources. Three-quarters of the lending of the financial institutions went to members of the upper income group, about one-quarter of the total population.

(3) The Development of Housing Co-operatives

It was apparent that housing finance from formal institutions was not being made available for some three quarters of the urban population as, on the terms on which the loan could be obtained, their incomes were insufficient for the loan repayments.

A Housing Co-operative has the special advantage because it provides an important link between the low income borrower and the formal institution, and small loans can be made to help them.

For this reason, a Housing Co-operative should be further developed and encouraged.

(4) Information Collection

It is important that it should have access to regular and detailed information on what amounts of housing finance are being supplied from what sources and to what income levels of public. However, a central body such as a Housing Council, should exercise an effective monitoring role.

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BETTER HOUSING FOR THE PEOPLE

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Ministry of Lands,
Construction and Housing
Zanzibar

BETTER HOUSING FOR THE PEOPLE

ABSTRACT

This paper attempts to illustrate the Government's decision in 1964 to provide free housing to the people both in urban and rural areas and the subsequent changes in policy towards cost recovery to self-reliant shelter sector.

INTRODUCTION

Zanzibar, which comprises of Zanzibar island which area is 1,666 sq. km., and Pemba island with an area of 988 sq. km., forms part of the United Republic of Tanzania. Zanzibar has its own government.

The island of Zanzibar is mainly flat but has a raised strip in the central area of the northern part which attains an elevation of 105 meters. The geological composition of the island is mostly a clay-like sand, submerged in alluvial terrain along the coast and other soil composition is mainly of low spread of dry, thinly vegetated reef limestone with smaller terrace features at intervals.

Pemba island, on the other hand, consists of a tortuous hill system along the entire western strip, which, however, attains a maximum elevation of 75 meters. Geologically, Pemba can be divided into marine clay and sand beds, clay and sand beds and raised limestone reef. The most fertile area is in the western belt of both islands.

Both islands have an average temperature between 30°C. and 35°C. during the larger part of the year, with a minimum mean temperature of 20°C. during the cool season which is between the months of April and July. Zanzibar's humidity exceeds 80% for nine months of the year, whereas, in Pemba, humidity is lightly lower. The rainy seasons for both islands are during the months of March, April and May which are called the long rains with an average rainfall of 324 millimeters

and the short rains are during the months of November and December with an average rainfall of 148 millimeters. The dry seasons are during July, August, September and October.

Both islands have plenty of spring water within the periphery of Zanzibar Town and the three major urban areas of Pemba island. Where there are human settlements, well water would be found in the rural areas.

POPULATION

Zanzibar island is divided into three regions with six districts, whereas Pemba island has two regions with four districts.

The population of Zanzibar from the 1978 census is 479,235. This figure is made up of Zanzibar island with 273,365 inhabitants and Pemba island with 205,870 inhabitants. The population density of Zanzibar is very high compared to many countries in Africa. There are 164 persons per sq. km. in Zanzibar island and 208 persons per sq. km. in Pemba island as compared to the most densely-populated regions on the mainland Tanzania, that of Mwanza, with 73 persons per sq. km. and Kilimanjaro with 68 persons per sq. km. and with the whole of Tanzania mainland with 18 persons per sq. km.

The urban population is 138,864 of which 110,699 inhabitants are in Zanzibar island, the remaining 28,195 inhabitants are in Pemba island.

The preliminary results of the 1978 census show that the total population increased from 354,360 in 1967 to 479,235 in 1978, representing a 35% increase over the period of 11 years, giving an annual growth rate of 3.2%. While the annual growth rate of 3.2% for Zanzibar island is equal to the national, that is, Tanzania growth rate, the figure of 2.3% for Pemba island is well below the national average which is 3.3% and is probably representative of massive population movements from Pemba to Zanzibar or to the mainland or elsewhere. On the other hand, the urban population grew from 83,541 in 1967 to 138,864 in 1978, giving an annual rate of 6%.

TABLE 1. RECORDED POPULATION OF REGIONS AND DISTRICTS FOR 1967 AND 1978 AND THE GROWTH RATES

<u>Regions and Districts</u>	<u>Population 1967</u>	<u>Population 1978</u>	<u>Annual Growth Rate %</u>
Zanzibar Island Total	190,117	273,365	3.2
Urban/West Region	94,894	143,616	3.7
Urban District	68,380	110,669	4.4
West District	26,514	32,947	1.5
South Region	39,004	52,325	1.2
South District	17,251	21,943	2.2
Central District	21,753	30,382	2.8
North Region	56,219	77,424	2.8
North 'A' District	35,464	48,146	2.8
North 'B' District	20,755	29,278	3.0
Pemba Island Total	164,243	205,870	2.3
North Region	71,972	106,300	3.6
Wete District	---	58,923	---
South Region	92,271	99,570	1.1
Chake Chake District	46,482	47,759	0.2
Mkoani District	45,789	51,811	1.2

SOURCE: Statistical Abstract Vol. II, June 1982, Ministry of State (Planning)

TABLE 2. RECORDED POPULATION OF URBAN AREAS IN CENSUS YEARS 1967 AND 1978 AND GROWTH RATES

<u>Town</u>	<u>1967 Census</u>	<u>1978 Year</u>	<u>Annual Growth Rate %</u>
Zanzibar	68,490	110,669	5.6
Wete	8,469	12,874	4.7
Chake Chake	4,868	9,643	8.9
Mkoani	1,714	5,678	21.0
TOTAL	83,541	138,864	6.0

SOURCE: Statistical Abstract Vol. II, June 1982, Ministry of State (Planning)

TABLE 3. NUMBER OF HOUSEHOLDS 1978 CENSUS

<u>District</u>	<u>Rural Areas</u>	<u>Urban Areas</u>	<u>Total Number of Households</u>
Zanzibar Island	38,192	28,810	67,002
North 'A'	11,747	290	12,037
North 'B'	6,627	1,181	7,808
Central	7,476	214	7,690
South	4,636	715	5,351
West	7,706	---	7,706
Town	---	26,410	26,410
Pemba Island	38,225	7,774	45,999
Wete	10,045	2,680	12,725
Kande	9,258	1,806	11,064
Chake Chake	8,135	2,047	10,182
Mkoani	10,787	1,241	12,028

SOURCE: Shelter for an Island Community, Saad Yahya and Associates, May 1982.
Based on 1978 Census.

Zanzibar has more males than females, whereas, in Pemba, the reverse is the situation. Another important phenomenon is that the 1978 Census records a substantial increase as compared with 1967 in the number of people under the age of 30 years, especially those in the 0-20 year age group. This will have an important effect on household formation during the next decade as these children get older and either get married or leave home to establish their own households. (Saad Yahya & Associates, May 1982 and 1978 Census Report. See Fig. 1.)

Absolute Numbers For
Five Year Age Groups

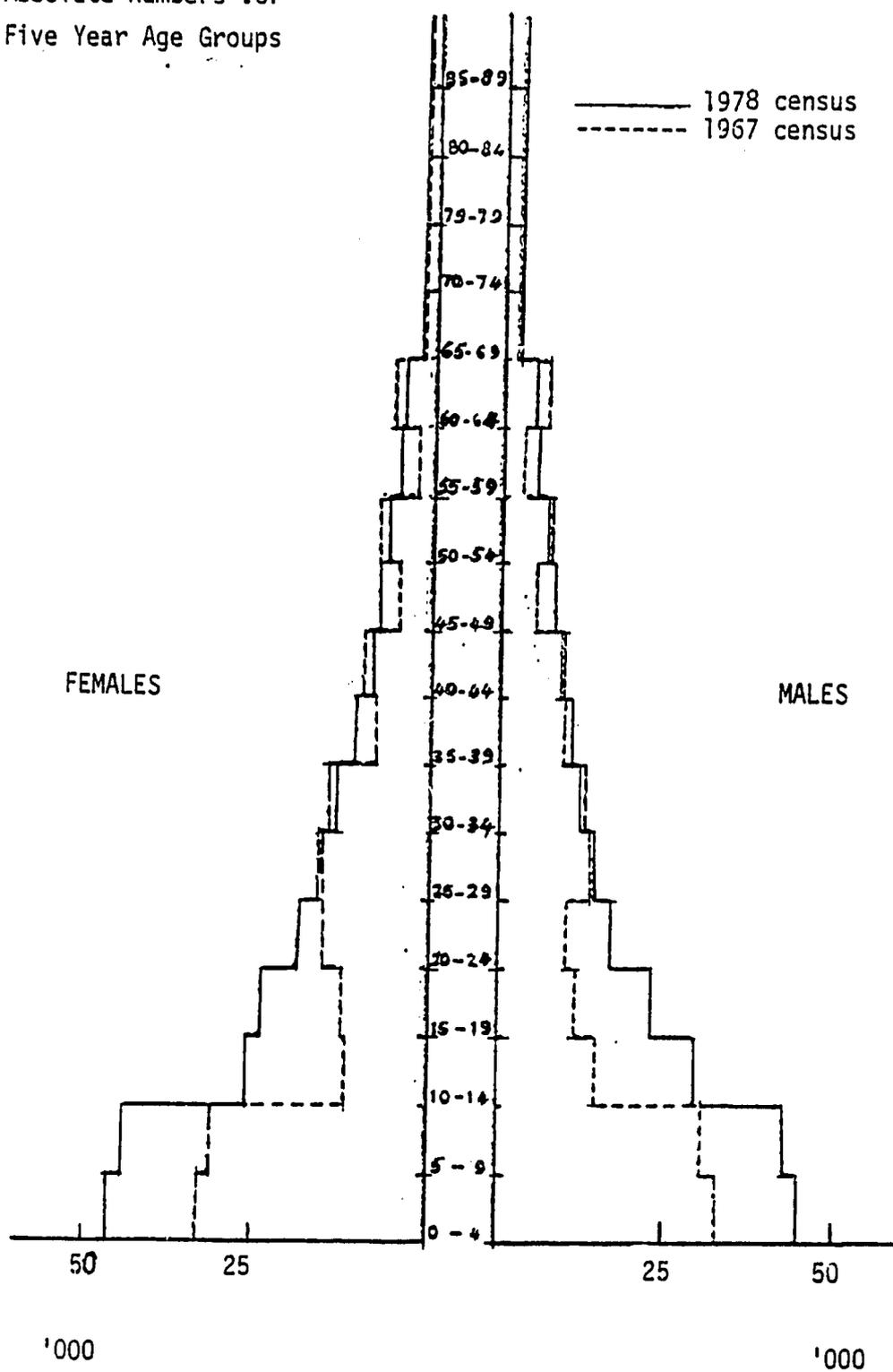


FIG. 1

INCOME

The main source of income for these islands is cloves and coconuts. Cloves alone account for about 80% of the national income of about 80 million shillings a year. But, this figure is decreasing each year as the crop decreases due to the aging clove trees. However, a regeneration scheme has been started. The remaining 20% is provided by coconuts and other produce like chillies, coconut oil, coir fiber, sea shells and cadamon. The national income is slightly over Shs 1 billion. The per capita income is Shs 705, about US \$74.

HOUSING AND HUMAN SETTLEMENT

Zanzibar Town is divided into two areas, the Stone Town which has the storeyed buildings and the Ngambo area which has the low traditional houses and huts. A tidal creek used to divide these two areas and canoes were used to ferry people between the two areas, hence the name Ngambo. The creek was terminated by a basin forming a shape of banjo and it was called the banjo basin, both of which have now been reclaimed and turned into public open space and public garden, respectively. The area of the Zanzibar Town is 16 sq. km. with a population of 110,669 of which 15,493 inhabitants are living in the Stone Town which area is 95 hectares.

The importance of providing the people of these islands with decent housing has been recognized and emphasized by the Government of Zanzibar since 1964. The whole population had already had some form of shelter but the policy was to improve their living conditions by declaring that it would provide free modern housing to the people.

This started with the construction of 150 flats, with two and three bedrooms at Kikwajuni in Zanzibar Town with an aid from the Government of German Democratic Republic. The occupants of these flats were either owners of the demolished houses or people in need of housing and given free. They were required to pay for their

water and electricity. Each of the unit had an electric cooker which was also given free.

The Kiliwani Estate was the next major housing project undertaken by the Government with its own resources.

This schedule which was started in 1966 and completed in 1971 comprised of 403 flats with 2 or 3 bedrooms in 15 blocks costing Shs 15,000,000 (Shs 37,220 a flat). This figure excludes the savings resulting from the work done by self-help. This estate was used as a resettlement area for the mass clearance of houses in the Ngambo area to make way for the long, six- to eight-storeyes high blocks. It was planned to construct ten blocks, 400 meters long, comprising 1,400 flats at Michenzani as a start in 1970. Construction work is still going on and so far 1,136 flats have been completed and occupied by people who have been compensated for their demolished houses or by those who did not have decent houses. The compensation procedure did not take into account the value of the demolished house or to the number of houses owned. One would be compensated with one flat only.

Since that time, modern blocks of flats were built in many areas of Zanzibar and Pemba islands, both urban and rural.

In 1967, the Government established a Development Fund specifically for housing development schemes in urban and rural areas. Civil servants were required to pay 3% of their salaries as a development levy and on return to be given free housing. The decree establishing this fund had to be amended in 1980 when the government changed its policy of giving free housing in 1978 and the fund was used for overall development schemes.

As from 1976, the government opted for detached or semi-detached low houses instead of the multi-storeyed blocks of flats which were fairly new to Zanzibar

society and culture, hence not popular.

Mass housing programs were embarked in about 200 villages of both Zanzibar and Pemba islands with people's participation under self-help schemes. All the resources, financial and technical were provided by the government.

These programs represented a major departure from the housing efforts undertaken by the former governments and also the programs were executed by spontaneous action on the part of the people and their leaders in a process which bypassed many of the steps and professional skills normally encountered in orthodox project design and management. These schemes also enabled the local population to acquire new building techniques by making cement and clay bricks and also to build both storeyed houses and low houses and putting in of infrastructure.

The schemes were carried out smoothly and efficiently for the first two years but, thereafter, process almost stood still and we were left with many incomplete houses scattered all over the islands. The main reason attributing to this situation is financial constraint. Zanzibar's economy in the late 1970's was not very sound as it was in the 1960's. Housing was given top priority in the annual budgetary allocation against agriculture and industry and as cost recovery element was not built into the rather ambitious program this gave a heavy burden on Zanzibar's dwindling economy with the astronomical inflation.

A two-bedroom flat which cost Shs 32,000/- in 1970's now costs over Shs 150,000/-.

The government has now decided to complete the houses in one village of a district rather than tackling them all simultaneously, due to financial and technical constraints.

The policy of giving free housing changed to rentals, sale or tenant purchase system. This decision was made in 1978 during the implementation of the

first Three-Year Social and Economic Development Plan, July 1978 - June 1981. Even then, the rents are relatively low and the government has to spend large sums of money subsidizing the maintenance. Civil servants occupying government houses pay rent calculated at 6½% of their salary for a three-bedroom flat. The houses/flats have been graded into five categories:

Grade A	6½%
Grade B	5%
Grade C	4%
Grade D	3%
Grade E	

depending on the number of bedrooms and condition of the house/flat. Houses under Grade E category are being assessed by the Housing Section of the Ministry of Lands, Construction and Housing.

The whole rent system is being reviewed under the existing Rent Restriction Decree introduced in 1953 with a view of introducing economic rents but with the purpose of motivating people to build their own houses by giving building materials loans.

HOUSING STOCK

The houses of Zanzibar and Pemba islands are divided into the following categories:

i) Stone Houses: These are the traditional houses found in the Stone Town of Zanzibar and Chake Chake in Pemba. The historic Stone Town of Zanzibar will be discussed later in the paper.

ii) Houses built under the Development Program: These are the houses explained earlier in the paper.

iii) Private Houses: These are houses built by private individuals either on private land or on plots allocated by the Government. The number of these houses, however, is small.

iv) Government Houses: These are the public houses built specifically for civil servants, police, military personnel, medical staff, agricultural staff and teachers. The quantity is fairly large.

v) Planned Temporary Houses: The major part of Zanzibar Town and the three towns in Pemba contain what we call temporary houses or huts because they are built of wattle and mud with either thatched roof 'makuti' (coconut palm leaves) or tin roof 'madebe' (containers for kerosine) or corrugated iron sheets. The building of these 'huts' is controlled by an existing legislation.

vi) Illegal Squatters' Houses: This scene is fairly new and fast growing in Zanzibar. The main cause for this land invasion is that the fast growing urban population and the migration from Pemba to Zanzibar has outpaced the government's ability to provide surveyed plots due to shortage of technical personnel.

The quality of the housing stock is still being analyzed from the 1978 Census data but it can be said that it is generally good.

Houses built by the formal sector since 1964 are shown in Table 4. The informal sector housing is negligible.

TABLE 4 -- DEVELOPMENT HOUSES 1964 - 81

Districts			Houses to Be Built	Houses Completed	Incompleted Houses
<u>Zanzibar Island</u>					
Kikwajuni	)	-- Blocks	150	150	--
Kilimani	)	-- Town District	403	403	--
Michenzani	)	-- Blocks	1,400	1,136	264
West District		-- Semi-Detached	2,219	312	190
North "A" District		-- Blocks	136	112	24
North "B" District		-- Semi-Detached	3,992	180	3,812
		-- Semi-Detached	2,864	100	2,764
Central District		-- Blocks	64	32	32
South District		-- Semi-Detached	1,370	288	1,082
		-- Blocks	96	96	--
		-- Semi-Detached	2,871	117	2,754
<u>Pemba Island</u>					
Wete District		-- Blocks	196	196	--
Micheweni District		-- Semi-Detached	4,135	177	3,958
		-- Blocks	48	48	--
Chake Chake District		-- Semi-Detached	2,805	102	2,703
		-- Blocks	136	136	--
Mkoani District		-- Semi-Detached	3,917	290	3,627
		-- Blocks	171	171	--
		-- Semi-Detached	3,807	196	2,891
			30,060	4,242	25,818

SOURCE: Department of Buildings and Maintenance

CONSERVATION AND REHABILITATION OF THE OLD STONE TOWN

The Old Stone Town of Zanzibar has a unique architectural character which is justly famed throughout the world. Some buildings are of specific historical significance, most of the secular buildings present fine examples of the local architectural style. The lime plaster decorations and the typical carved doors portray a high skill of craftsmanship and rich cultural heritage. Its narrow streets, intended mostly for pedestrians, winding through brilliant sunshine into cooling shadows together with ornamental open space make the Town into an atmosphere of Arabian night charm.

The Old Stone Town which started as a fishing settlement at a beach point known as Shangani, midwest of the Zanzibar Island became its capital in about the year 1828. It is the only functioning historic city in the whole East African coast.

Zanzibar Islands have a long history and a special place in Eastern and Central African development. It was the first landing place for all foreign influences which contributed to African modern development.

The Old Stone Town, which area is 95 hectares with a population of 15,493 inhabitants, apart from being an entity in itself has 17 buildings protected under The Ancient Monuments Preservations Decree of 1927, namely, Old Arab Fort, Beit el Ajaib, Hamamni Baths, The People's Palace, The Old Market, The AgaKhan Mosque, Bharmal Building, Kilosa House, The Mambo Msiige Building, Tip Tip House, The Court Building, The Museum, Livingstone House, Ithnashiri Dispensary, Bamnara Mosque, Catholic Mission Church and The Anglican Cathedral (The Old Slave Market). The declaration of the above protected monuments was made in August 1979.

An application has been made to UNESCO in 1981 to include the above buildings in the World Heritage List Cultural Property by the Ministry of National Culture and Sports.

Today, much of the Town is as it was 150 to 200 years ago, virtually unaltered by international or western influences and as such has tremendous impact to scholars, researchers, industrialists, technicians and visitors. Before the 1964 Revolution, a majority of the buildings, which were made of coral stone, red earth, lime mortar and plaster, were in the hands of private persons and were therefore being constantly repaired and were well maintained by the owners. After that, when many of the buildings were abandoned and the Government acquired them, it was faced with the problem of maintenance due to lack of financial and technical resources. As a result, some buildings have either totally, or partially, collapsed.

Other problems, too, are facing the Town, mainly changing its character by using the existing building stock for purposes other than those designed for, opening up the streets to vehicular access making them uncomfortable to walk through, congestion due to migration and putting up new buildings not conforming to the surrounding architecture.

The government, having seen the consequences of these problems, decided to prepare a development plan with an integrated approach to the needs of restoration, renovation and town renewal.

A formal request was made by the Ministry of Lands, Construction and Housing to the Nairobi-based United Nations Center for Human Settlements (HABITAT) for technical assistance through the advice of Professor Robert Barclay, the then HABITAT's Chief Technical Adviser, based at Ardhi Institute in Dar es Salaam. This approach had an immediate approval as Ardhi Institute was already involved in the surveying of the Stone Town's building stock by their Building Design students as part of their training in recording and analysis of traditional constructional design. The achievements were of mutual benefit, providing the Zanzibar authorities with measured drawings of the existing stock. Four surveys

have so far been carried out, that of the Tip Tip House, the Old Fort, the Kilosa House and the Livingstone House.

One objective of the exercise was to encourage students from Zanzibar about to graduate from Ardhi Institute, to take part in town renewal programs, as a pre-requisite to their undergoing further education and training under arrangements to be determined, to full professional level.

The main objective of the Project within the context of the overall development potential, was to prepare an outline integrated development plan, and to define the requirements of formulating and implementing policies and programs designed to renovate, upgrade and revive the Old Stone Town. In support of this development planning framework, the output from the planning studies will include:

- (a) recommendations for policies and programs to guide the Town's future development and economic growth, including priorities for rehabilitation and renewal.
- (b) definition of the follow-up action required for the preparation of a detailed plan, together with the implementation program policies and development controls.
- (c) analysis of the insitutional, manpower, training and financial requirements for implementing the follow-up actions required, including mobilizing all available local resources, and providing detailed proposals, including identification of financial requirements for further technical cooperation.

This overall study was recently completed by an international team of experts and presented their preliminary findings and recommendations to the Ministry. A survey was conducted of the structural condition of all 2,497 buildings within the Stone Town planning area to determine the extent of deterioration and estimate

the cost of redevelopment. The condition of public services, open space and infrastructure which affect health and environmental quality were evaluated. A survey was also conducted to determine the social and economic characteristics of the present inhabitants as well as their general living conditions in order to recommend essential improvements.

The study indicates that almost forty percent of the buildings are in poor or dilapidated condition including more than one hundred and sixty (160) partially collapsed structures. Generally speaking, the residential structures were found to be in the worst condition. In many cases, the advanced state of deterioration represents a serious threat to the safety of the residents and to neighbors. An emergency program of repairs is proposed with priorities given to replacing rusted roofing sheets, gutters and downspouts which the study identified as the principal cause of the present deterioration. The emergency effort should be followed by a broad program of upgrading and regular maintenance. An implementation strategy was drafted suggesting appropriate roles for government agencies and for the residents of the Stone Town.

Given the acute housing shortage in Zanzibar, it is critical to preserve the existing housing stock. In addition to the general need for upgrading, some sections of the Stone Town will require major redevelopment including removal of partially-collapsed buildings and inappropriate uses. In such areas, adequate provision should be made for open space and for new housing units to replace the dilapidated ones. The study indicated that immediate efforts will be needed to conserve the existing housing stock, as further delay could result in major disasters and much loss of life and property.

Conservation of the historic and architectural values are also important. The study proposed design guidelines for new buildings and suggested changes in

existing building by-laws to regulate modifications to the exterior appearance of the more significant buildings. Included in the proposed changes would be regulations against the use of oil-based paints, cement scree or spray cement plaster on any building of coral stone and red earth construction as such surface finishes trap moisture inside the walls causing rot of the floor supports which are made of mangrove poles and eventual collapse. Only the traditional lime plaster and white wash finish should be used as well as preserving the characters of the Town. The study also proposed incentives for private owners to invest in restoring their buildings and suggested creating a special loan fund to assist with approved renovation work.

The study also suggested a number of areas where economic development potential exists and recommended specific government investment strategies and incentives aimed at attracting private capital and increasing employment opportunities in the Stone Town, thus generating revenues which will be needed to sustain any temporary improvement of living standards which the proposed project may effect.

Specific proposals included expansion of the present port facilities, commercial fishing and boat building. To stimulate general economic growth and encourage trans-shipping a limited free trade zone was also suggested. Buying and Marketing cooperatives were proposed in order to stimulate the growth of cottage industries such as tailoring which is largely based in the Stone Town into a full-scale garment industry. Tourism is another sector with great economic potential. The narrow streets and bazaars of the Stone Town hold considerable interest for foreign visitors as do the historic sites, the fine old buildings, the lovely beaches, aromatic spice plantations, and the unique cultural heritage of Zanzibar. The experts also recommended to include four more buildings to the seventeen, namely, the State House, the Darajani Chawl, Mackenzie Building and Khoja Charitable Caravanserai.

Support for the initial program efforts will be sought by the Ministry from international and bilateral assistance agencies, as well as from regular budget funds.

The study which took an intensive three months was conducted by an American architect/planner and development adviser, Mr. Royce LaNier, who was the team leader; and a Danish architect, historic preservation specialist, Mr. Fleming Aalund, who until recently was with Ardhi Institute and supervised a number of Building Design students' projects in Zanzibar. Included in the team were a Canadian planner/geographer, Professor Aidan McQuillen, who is with the University of Toronto; a tourism adviser, American economist, Mrs. Patricia McPhelin; and a legal adviser, specialized in planning legislation, British Professor of Law, Professor Patrick McAuslan, who is with the University of Warwick. The consultants worked with the full support and active participation of the national staff of the Ministry including a volunteer architect/planner from the German Federal Republic, Mr. Ulrich Malisius.

The government's concern for conservation of the Stone Town is reflected by allocating Shs 10 million in the plan period 1978-82, for repair. The allocation, however, is not enough to carry out all the repair needs.

BUILDING MATERIALS

Building materials used are as shown below:

ROOF	- framing/decking	sown timber (podo, cypress, etc.), boritis (mangrove poles) and fitos, reinforced concrete.
	- cladding	split tins, galvanized corrugated iron sheets, corrugated asbestos cement sheets, mangalore tiles, concrete tiles, bituminous felt, asphalt.
WALLS		makuti; mud sticks, coral rag, lime mortar and sticks, sun baked bricks, burnt bricks, soil/cement concrete blocks, corrugated iron sheets on timber, plain asbestos cement sheets, sown timber.

FLOORS	- structural	coral/lime slab on boritis, concrete slab, rammed earth.
	- finishes	rammed earth, cement screed, p.v.c. tiles, timber, quarry tiles.
CEILINGS		boriti and fito framing with stone, mortar infilling, hardboard, softboard, timber, makuti (palm leaves).
WINDOWS		timber with modern glazed shutters, metal, timber/glass louveres
DOORS		timber (panelled, battened or flush), steel

70% of these building materials are imported, hence a large amount of foreign exchange is being spent. To reduce the amount of importation, the government is establishing a cement factory and exploring the possibility of making lime bricks since coral stone is in abundance.

CONSTRUCTION SYSTEM

The mass housing construction programs described earlier were carried by the Building Maintenance Department. The few local contractors handle small jobs only and the large projects are undertaken by foreign contracting companies. The Building and Maintenance Department apart from constructing houses is also handling the public buildings. The private sector uses the local contractors as well as local artisans.

The building procedures used are regulated by the existing decrees based on the British system but modified to suit the local conditions.

HOUSING DEMAND

With the population growth of Zanzibar and Pemba at 3.3% per year and 6% annual growth for the urban population, 2,800 new houses a year would be needed for both the urban and rural areas whereas the urban areas would need 1,800 new houses a year.

LAND AVAILABILITY AND TENURE

The existing land tenure system is governed by the Presidential Decree of 1965 which vested all land in the government retrospectively from March 8, 1964. In order to effect the land reform program after the Revolution, the Land Distribution Decree 5 of 1966 was passed which was subsequently amended in 1969 (Presidential Decree 1 of 1969) to authorize the distribution of urban plots for residential purposes.

The titles granted under the 1966 Land Distribution Decree for the 3-acre plots of rural land were for the life of the grantee and his spouse whereas the certificate of titles issued under the 1969 amendment (PD 1/1969) grant title forever. No land rent is charged, not even on commercial and industrial plots. However, a number of inadequacies have been found in the existing land tenure system and the government has formulated a new land policy which would soon be tabled before the Cabinet. The new land policy will also address the question of availability of serviced plots taking into consideration sources for finance, manpower and secured tenure.

At the moment, the Swedish Agency for Research Cooperation with Developing Countries (SAREC) is carrying out a pilot project study on land registration methods for both rural and urban areas with a view of carrying out a systematic cadastral survey.

A Master Plan for the Zanzibar Town covering a period of 20 years has just been completed. Similar plans for the four towns in Pemba have also been done.

DESCRIPTION OF AGENCY AND ITS PRINCIPAL FUNCTIONS

The Ministry of Lands, Construction and Housing is responsible for:

Planning and implementing policies for all land matters, housing, both urban and rural, and building construction.

Surveying and Mapping including land registration.

The Ministry has three Directorates which are headed by Directors:

1. Department of Lands and Surveys responsible for:
Surveying and Mapping and Land Registration, Urban and Rural

Planning.

2. Department of Building Construction and Maintenance is responsible for:

Constructing formal housing and public buildings, maintenance of government buildings.

3. Department of Economic Planning and Administration is responsible for:

Finance, planning development projects under the current Five Year Plan, 1981-86, and housing and furniture.

The Annual Budget for the Ministry is Shs 25 million.

Organizational structure of the Ministry is shown in Fig. 2.

CONCLUSIONS

The government having seen the importance of cost recovery as a catalyst to continuous housing production by individuals has instituted a new housing policy with the following recommendations:

1. Prepare an action plan for completing unfinished projects and deleting redundant projects from the program.
2. Improve project planning methods within the Ministry.
3. Review the rental structure for state-owned houses.
4. Institute a system of land rent and/or service charge for newly-enacted urban plots, especially commercial and residential plots.

5. Form a national housing agency (e.g., ZUDA, i.e., Zanzibar Urban Development Authority) to coordinate housing and human settlements development.
6. Clarify and codify the land tenure system.
7. Prepare regional physical plans for both islands.
8. Avoid duplicating urban projects in rural areas; the special needs of agricultural and fishing communities should be taken into account when designing rural housing projects.
9. Prepare an inventory of all government houses and who occupies them.
10. Improve the estate management function in the Ministry so as to obtain maximum revenue from government properties and to make maintenance more efficiently managed.
11. Devise an appropriate maintenance and conservation program for stone houses in Zanzibar and other towns.
12. Carry out a user study of 'Nyumba Za Maendeleo' (Houses for Development) especially the multi-storeyed blocks of flats to provide feedback for the design and location of future projects.
13. Document in the form of case studies, articles films and other audio visual materials the experience gained in building the 'Vijiji vya Maendeleo' (Villages for Development).
14. Introduce a land registration system to facilitate mortgage lending.
15. Widen the range of services provided in the squatter up-grading schemes.
16. Investigate the feasibility of small scale manufacture of building materials, e.g., cement, bricks and tiles using energy efficient methods.
17. Carry out research into use of local materials especially lime, coral, bamboo, makuti, local timbers and soil-cement blocks; links with the Building Research Unit at Dar es Salaam should be established.

18. Do not abandon non water-borne sanitation (e.g., pit latrines) wherever practicable.

19. Investigate the impacts/effects of the local government bill on housing development and integrate the provisions of the bill with the operations of the proposed national housing authority.

20. Initiate a housing finance study with special emphasis on creating savings and loans associations and other small-scale credit institutions.

21. Review the role of the Tanzania Housing Bank in Zanzibar with a view to improving people's access to credit and government control on its operations, possibly by creating a new subsidiary tailored specifically for Zanzibar's needs.

22. Allocate more resources to site and services programs in relation to the provisions of rental and tenant-purchase schemes.

23. Make better use of the existing building code especially the provisions relating to temporary construction and low-cost infrastructure.

24. Provide for adequate community facilities and livelihood programs when designing new villages, site and services schemes and squatter up-grading projects.

25. Initiate a training program for housing development personnel.

26. Establish links with the Center for Housing Studies in Dar es Salaam and the Housing Division in the Ministry of Lands Housing and Urban Development.

STRUCTURAL ORGANIZATION OF THE MINISTRY OF LANDS, CONSTRUCTION AND HOUSING

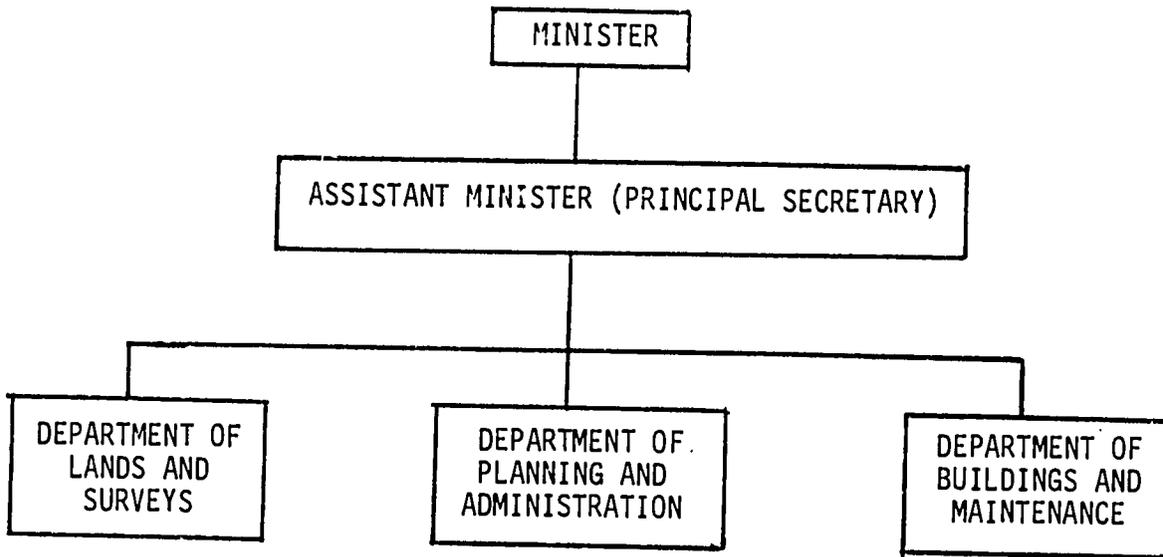


FIG. 2

REFERENCES:

1. The Zanzibar Planning Commission, The Three year Social and Economic Development Plan, 1 July 1978 - 30 June, 1981. June 1978.
2. Department of Statistics,
Ministry of State (Planning)
Zanzibar, Statistical Abstract Vol. II. June 1982.
3. Saad Yahya & Associates, Shelter for an Island Community, A Housing Strategy for Zanzibar and Pemba. May 1982.
4. Saad Yahya & Associates, Land Policy for Zanzibar and Pemba. June 1982.
5. Muhammad S. Sulaiman, Zanzibar: An Integrated Development for the Old Stone Town. Commonwealth Surveying & Land Economy No. 15, July 1982.