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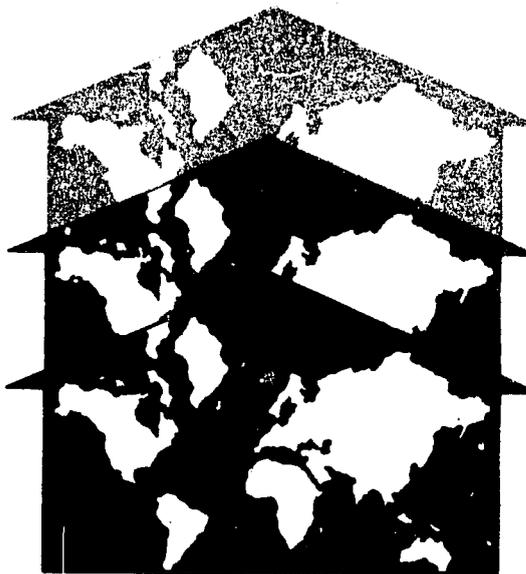
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**PHILIPPINES SHELTER SECTOR
ASSESSMENT**

Volume I: Country Report

November 30, 1978

**AGENCY
FOR
INTERNATIONAL
DEVELOPMENT**



OFFICE OF HOUSING

**PHILIPPINES SHELTER
SECTOR ASSESSMENT**

Volume I: Country Report

**Office of Housing
Agency for International Development
Washington, D.C.**

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FOREWORD

This study was conducted during 1978 by Planning and Development Collaborative International under the auspices of the Office of Housing of the Agency for International Development and through funding provided by this Office. The purpose of this study was to develop information and make recommendations relating to the shelter sector in the Philippines, in response to a request from the Government of the Philippines.

The study team was led by Robert N. Merrill, housing and finance specialist, with other team members being Ernest Slingsby, architect/engineer, Audrey Parkinson, social scientist, and Marilyn Dawson, housing generalist/planner. Field work was completed in August 1978.

While the findings and recommendations of the report have been discussed with representatives of the Government of the Philippines, the report is not to be interpreted as the official position of either the Government or of the Agency for International Development.

It is hoped, however, that the Government of the Philippines will find the report and its recommendations useful as it formulates and implements future shelter programs.

David McVoy
Assistant Director
Office of Housing .

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LIST OF ABBREVIATIONS

AOP - Angeles-Olongapo Program Area
CDAP - City Development Assistance Program
CPDO - City Planning and Development Office
CPDS - City Planning and Development Staff
DPS - Department of Public Services
GSIS - Government Service Insurance System
HSC - Human Settlements Commission
IBRD - International Bank of Reconstruction and Development
ILO - International Labor Organization
LWUA - Local Water Utilities Administration
MLGCD - Ministry of Local Government and Community Development
MMA - Metropolitan Manila Area
MSSD - Ministry of Social Services and Development
NCSO - National Census and Statistics Office
NEDA - National Economic Development Authority
NEPC - National Environmental Protection Council
NHA - National Housing Authority
PD - Presidential Decree
RPTA - Real Property Tax Administration
RSC - Rural Service Center
SEAP - Self-Employment Assistance Program
SSS - Social Security System

SUMMARY OF RECOMMENDATIONS

A. Introduction and Purpose

This Shelter Sector Assessment (SSA) of the Philippines is in three parts: Volume I, an overall shelter sector assessment of the Philippines; Volume II, a shelter sector assessment of Angeles City; and Volume III, a shelter sector assessment of Olongapo City. This volume, the overall SSA of the Philippines, sets out the dimension of the shelter problem in the country, describes the socioeconomic characteristics of the low-income population, and details the institutions and programs the government has evolved for dealing with shelter problems. Components and constraints in the shelter delivery system are described in Chapter IV. At this point the SSA deviates from the norm in that, instead of analyzing the shelter problems in Metro-Manila, where almost 40 percent of the country's urban population resides, the SSA describes the impact of the national programs on the urban problems in intermediate sized cities.

Under the auspices of the government's City Development Assistance Program (CDAP), known as the Rural Service Center Project (RSC) by the USAID mission, two of these cities were visited: Angeles and Olongapo. Based on the data collected and analyzed in each of the two cities, Chapter V analyzes the local government structure, local shelter sector programs, and the physical, social, and economic characteristics pertaining to their shelter problems.

Although Angeles and Olongapo might be considered atypical in that their economies are largely dependent on the adjacent United States bases, similar shelter problems and constraints in the national delivery system exist in similar sized provincial cities. The analysis and the similarities in problems in each of the cities, therefore, might be considered illustrative of problems and constraints in other CDAP/RSC cities.

The respective chapters on prospects and analyses in each of the city reports (Volume II on Angeles and Volume III on Olongapo) set out alternative shelter approaches and possible projects designed to meet the shelter needs of their lower-income groups. These approaches and projects are considered within the context of the CDAP/RSC program; individual components of this program are combined in a comprehensive, area-specific approach focused on the shelter problems of particularly depressed barangays.

Before proceeding to the summary of recommendations contained in the three reports, the basic criterion on which the project feasibility studies were based should be explained: financial replicability. A major recurring theme in all three reports is the critical restraint posed by finance. In a word, housing finance at terms affordable by low-income families is nonexistent in the vast majority of Philippine cities. Although steps are being taken by the national government to correct this situation, the present lack of long-term financing in the shelter sector must be the baseline from which all projects are designed.

Given the extremely low financial resources which most cities can commit to new, large-scale development, the cities will have to depend on national and/or international loans. Thus, in order to limit the debt burden of cities, projects must be largely, if not wholly, self-financed. To insure that project families can afford the monthly payments on economic terms, the project standards, and thus the monthly payments, must be kept quite low. As will be seen in the monthly payment tables in the city reports, project standards were reduced to levels affordable by families earning about ₱ 200 per month (roughly the 20th percentile) with repayment terms of 11 percent for 30 years. Although standards are low, these capital costs allow substantial physical and social improvements in the targeted barangays.

Given adequate collection mechanisms, the debt burden on the city should be negligible. In this manner, the city can continue to finance new projects with national or international loan funds. If projects are heavily subsidized at the outset, returns are inconsequential and the projects become one-time efforts which serve only the lucky few. Thus, low but adequate standards with minimum subsidies allow the replication of projects on a program basis, ensuring that total low-income shelter needs can begin to be met.

B. Constraints and Advantages

Before presenting the summary of recommendations, the following paragraphs highlight the major constraints to their implementation. On the positive side, the institutional and, at times, physical advantages that exist in the provincial cities are also noted.

1. Constraints

Institutional

1. As evidenced in Angeles and Olongapo, all major department heads are appointed by the president, i.e., are national civil servants paid by the city but promoted by the relevant national ministries. This situation makes it extremely difficult for the mayors and their staffs to plan and control city development.

2. The City Planning and Development Staffs (CPDS), appointed by the mayor, are new and largely inexperienced. Some already have large workloads, portions of which are not relevant to the principal CPDS function of planning and controlling city development.

3. In addition to the city departments, many local branches of national agencies and advisory committees are attached to city government. These further complicate project and program coordination because they often have overlapping functions and responsibilities.

4. To date no national housing programs exist in the majority of provincial cities. Operations of the National Housing Authority (NHA) have not yet reached subregional cities, and the new agencies established under the Ministry of Human Settlements are still being organized.

Financial

5. There is no local mortgage financing for middle- and lower-income housing.

6. City resources for low-income shelter finance are limited, if not nonexistent. Most municipal revenues are spent on operations, urgent capital improvements, and maintenance projects.

7. CDAP/RSC resources are usually used for other sectors and only a small number of families qualify for social security system loans on concessionary terms.

Physical

8. Well-located sites, including center city land costs for community improvement schemes, are usually privately owned and expensive. In Olongapo, as a result of the city's topography, well-located sites for new development are practically nonexistent.

9. Present infrastructure development standards are set at the national level and are unnecessarily high, especially for low-income neighborhoods where adequate roads and drainage do not exist.

10. There is a general lack of funds to finance maintenance and expansion of city-owned utilities.

11. Environmental sanitation is poor. Sewerage systems in low-income neighborhoods are either pit latrines or open drains. The latter frequently contaminate groundwater supplies. Garbage collection is inadequate and is sometimes dumped in or near low-income neighborhoods.

2. Advantages

Institutional

1. City governments are aware of local shelter problems and have often taken actions that are possible with limited resources.

2. Although inexperienced, City Planning and Development Staffs have carried out comprehensive studies, including framework development plans, and have identified projects focusing on the urban poor.

3. The Ministry of Human Settlements and its subsidiary agencies are being organized to coordinate and increase the effectiveness of activities in the human settlements field. NHA is expanding its operations to regional cities.

4. A national housing policy and housing program (1978-82) exist which emphasize the positive role sites and services and squatter upgrading can play in resolving low-income shelter problems.

Finance

5. City revenues will be increased and stabilized as the Real Property Tax Administration program is implemented.

6. Funds from the new National Home Mortgage Finance Corporation should allow primary lenders to extend loans to borrowers at longer terms. This should take middle-income pressure off low-income shelter schemes.

7. As the NHA expands its program, more joint venture resources should be available to provincial cities.

Physical

8. Land is still available within access to employment opportunities in most cities and, relative to Metro-Manila, is still affordable. The new Urban Land Reform Decree, although its provisions are as yet unclear, should make urban land more available.

9. In projects financed by the city, the city can usually determine the infrastructure standards.

10. Autonomous local water districts set up under the local Water Utilities Administration are usually run more efficiently as are private or cooperative electrical utilities.

11. When the city health departments have taken an active role in environmental sanitation, solid waste collection has improved and training programs in environmental sanitation practices have been initiated.

C. Summary of Recommendations

Given the rapidly evolving support for shelter sector development in the Philippines, the following recommendations are made in order to overcome some of the constraints outlined above and, more importantly, to begin to alleviate the shelter and environmental problems of low-income families in provincial cities. Based on the nature of the three reports comprising this SSA, the recommendations are divided into two parts; (1) recommendations for the shelter sector at the national level, and (2) recommendations for the Angeles and Olongapo shelter sectors.

Since the SSA team was primarily concerned with documenting shelter problems at the local level, the national recommendations deal primarily with the institutional and financial aspects of expanding shelter and environmental upgrading programs for provincial cities. The recommendation for Angeles and Olongapo, on the other hand, concentrate on the physical and financial components of shelter and environmental upgrading projects along with means to improve the delivery of socioeconomic services at the city level. The latter recommendations are summarized from Volumes II and III and are based on the analysis in Chapter V of this volume.

1. National Shelter Sector Recommendations

Institutional

1. Due to the number (150) and geographical dispersion of the chartered cities in the Philippines, the NHA should recognize that most project formulation, development and administration must be done by city governments.

2. Given the existence of the City Development Assistance Plan (CDAP) in the Ministry of Local Government and Community Development (MLGCD), the role of the NHA in developing shelter programs in the provincial cities should include the following:

assistance in the planning of city-wide development programs;

advice on standards and allocation criteria for projects;

provision of technical assistance to City Planning and Development Staffs as necessary;

review of projects proposed by local governments;

financial assistance when necessary;

evaluation of project performance.

3. Based on the foregoing role of the NHA, close collaboration between the NHA and the MLGCD in shelter program development should be established in which technical support is provided by the NHA and administrative support by the MLGCD.

4. In order to initiate the recommended collaboration, the NHA should establish field offices in each region as soon as possible, representatives of which would work closely with the City Development Coordinators as well as the local representatives of the Ministry of Human Settlements, the Human Settlement Officers.

Financial

5. In order to stimulate an expanded shelter and environmental upgrading program in provincial cities, the NHA in collaboration with MLGCD and city government should aggressively expand the operations and funding of its local government joint venture program.

6. The NHA should seriously consider increasing interest rates in its joint venture schemes to the point where subsidies are minimized and the cities can realize a return on debt amortization.

7. In NHA-executed or assisted projects, construction costs should be more closely linked to unit sales prices such that presently high standards and heavy subsidies are reduced.

8. Minimum standards and/or income requirements should be lowered for SSS loans such that more funds are channeled to lower-income families.

2. Angeles City

Comprehensive Community Improvement

9. Barangay Program Components. Beginning in barangay Santa Teresita, regularize and improve depressed barangays by providing:

improved roads and footpaths;

potable water supply;

improved sanitation through samitary cores and septic tanks;

necessary community facilities;

housing improvement loans;

extension of secure land tenure.

10. Approximate costs for 27.5 hectares in Santa Teresita and 28 hectares in other depressed areas at the following standards: asphalt paved main roads with open concrete gutters, compacted gravel footpaths, water supply, community septic tanks and home improvement loans.

<u>Program components</u> 1/	<u>Component costs</u>
Infrastructure	₱ 11.8 Million
Home improvement loans 2/	₱ 3.8
Land at ₱ 30.00 per square meter	₱ 5.8
Total costs	₱ 21.4 Million

11. Target income groups have monthly incomes in the ₱ 200 to ₱ 400 range (approximately the 20th to 50th percentiles) at densities of 431 persons per hectare. The repayment terms for loans for infrastructure and land costs are 11 percent over 30 years with a 10 percent down payment (see Table 23, Chapter IV, Angeles City Report for details).

Sites and Services

12. Program Components. Improve and expand the Capaya resettlement scheme for low-income working families and those which must be resettled from blighted areas by providing:

new serviced plots;

housing improvement loans;

community facilities;

cottage industries in present industrial reserve.

13. Approximate costs for 13 hectares at similar standards to Santa Teresita. 3/

1/ See Appendix 2, Volume II for detailed cost breakdown.

2/ For this preliminary estimate, it was assumed that 50 percent of the project households could afford home improvement loans of ₱ 3,000 and the 50 percent would require small loans of ₱ 400 to connect their houses to municipal water supplies and communal septic tanks.

3/ See Appendix 2, Volume II for cost breakdown.

Program components
 Infrastructure and connections
 Home improvement loans ^{4/}
 Land at ₱ 3.00 per square meter
 Total component costs

Component costs
 ₱ 2.7 Million
 ₱ 1.6
 ₱ 0.4
 ₱ 4.7 Million

14. Target income groups have incomes similar, but somewhat higher than Santa Teresita. The project could also include some core houses.

Socioeconomic Programs for the Urban Poor

15. Upgrading of MSSD staff in planning, organizing, management and recording.

16. Design and development of cottage industries such as Barrio Extension using home craftsmen/assemblers.

17. Improvement in the extension and use of Self-Employment Assistance Program loans.

18. Feasibility studies of production for export, especially of the furniture industry.

19. Increase utilization of available health resources by increasing awareness among low-income families of health services offered.

Institution Building

20. Strengthen the CPDS by filling its present vacancies and expanding its staff.

21. Provide the CPDS with adequate office space, equipment and transportation.

22. Provide increased training for CPDS staff in project analysis and management.

^{4/} See footnote 2, p. 8.

Technical Assistance

23. Short-term technical assistance in social welfare and social work to strengthen local MSSD staff in community development and social case work.

24. Short-term technical assistance to train and assist the CPDS in carrying out local production feasibility studies.

25. Short-term technical assistance in the economic financial aspects of community improvement/sites and services project design.

26. Long-term sustained support in program and project formulation, execution and management with heavy emphasis on training.

3. Olongapo City

Comprehensive Community Improvement

27. Program Components. Beginning in barangay Pag-asa, improvement and legalization of squatter and nonsquatter families in the area of the present city garbage dump through:

construction of a circumscribing sea wall with land fill;

improvement and provision of roads and footpaths;

improvement of the drainage system;

provision of a potable water supply;

improved sanitation through sanitary cores and septic tanks;

small housing improvement loans.

28. Approximate costs for developing 45.5 hectares in Pag-asa, Banicain and Kalaklan at the following standards:

Recoverable costs, 5/ including asphalt paved main roads, compacted gravel footpaths, water supply and communal septic tanks:

Pag-asa (18.9 has.)	₱ 4.2 Million
Banicain (19.5 has.)	₱ 4.3
Kalaklan (7.1 has.)	₱ 1.6
Subtotal	₱ 10.1 Million

Nonrecoverable costs, including perimeter sea walls, land fill and surface water drainage:

Pag-asa	₱ 4.2 Million
Banicain	₱ 2.3
Kalaklan	₱ 0.6
Subtotal	₱ 7.1 Million

Home improvement loans for 50 percent of the estimated 3,185 households benefiting from the upgrading. The average loan size is ₱ 3,000. ₱ 4.8 Million

Total upgrading costs ₱ 22.0 Million

29. The target income group has monthly incomes ranging from ₱ 190 to ₱ 350 (approximately the 20th to 45th income percentiles) at densities of 378 persons per hectare (70 units per hectare). No land costs will be charged as the land is in public domain. The recoverable components including home improvement loans will be offered to project beneficiaries at repayment terms of 11 percent over 30 years with an initial 10 percent down payment (see Table 24, Chapter IV, of the Olongapo Report for details). Nonrecoverable components should be financed separately from either national or local budgets as they benefit the city as a whole.

Sites and Services

30. Project Size. Undertake additional feasibility study of sites in barangay Santa Rita and/or on the ridge above Upper Kalaklan for a project of 30 hectares, or approximately 2,100 units. The former is a good location but land is privately owned, therefore expensive. The latter site is in the public domain but presently has little or no access.

5/ See Appendix 2, Volume III for detailed cost breakdown.

31. Approximate costs for 30 hectares of public land developed at standards similar to community improvement schemes. 6/

Recoverable costs

Site development costs	₱ 9.0 Million
Home improvement loans <u>7/</u>	₱ 1.6
Subtotal	₱ 10.6 Million

Nonrecoverable costs

Access road	₱ 1.2 Million
-------------	---------------

<u>Total component costs</u>	₱ 11.8 Million
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Socioeconomic Programs for the Urban Poor

32. Family training in improved sanitation techniques.

33. Training of nutritionists for barangay centers to improve nutrition level in depressed areas.

34. Training of public health staff and other social service workers to increase use of available health resources.

35. Strengthen barangay training centers and the city vocational training institute.

36. Undertake feasibility studies for small industrial estate in Barrio Barretto based on supply industries to new shipyard in Subic municipality.

Institution Building

37. Fill existing vacancies in the CPDS and provide more intensive training in project analysis and development.

38. Transfer present unrelated functions of the CPDS to relevant city departments.

6/ See Appendix 2, Volume III for cost breakdown.

7/ It is estimated 75 percent of the 2,100 households would take average loans of ₱ 3,000.

39. Reduce excess staff in the Offices of the Mayor, City Engineer, City Treasurer, and Public Utility Department.

40. Initiate the RPTA as soon as possible.

Technical Assistance

41. Short-term technical assistance in public finance to recommend a program for putting the city's finances on a viable basis.

42. Short-term technical assistance and training in undertaking industrial feasibility studies.

43. Short-term technical assistance in design and costing of community improvement/sites and services type projects.

44. Long-term technical assistance with emphasis on training in program and project preparation, execution and management to build up the CPDS.

TABLE 1
 Summary Program Costs
 Angeles and Olongapo
 (millions of pesos and dollars)

Program Component	Cost
<u>Angeles</u>	
<u>Upgrading</u>	
Development costs	
Santa Teresita	P 5.9 Million
Other areas	P 5.9
Home improvement loans	
Santa Teresita	P 1.9
Other areas	P 1.9
Land	
Santa Teresita	P 2.9
Other areas	P 2.9
Total	P 21.4 Million
<u>Sites and Services</u>	
Development costs	
	P 2.7
Home improvement loans	
	P 1.6
Land	
	P 0.4
Total	P 4.7 Million
Angeles Total	(\$3.6 M) <u>P 26.1 Million</u>
<u>Olongapo 1/</u>	
<u>Upgrading</u>	
Recoverable	
Pag-asa	P 4.2 Million
Banicain	P 4.3
Kalaklan	P 1.6
Total	P 10.1 Million
Nonrecoverable 2/	
Pag-asa	P 4.2
Banicain	P 2.3
Kalaklan	P 0.6
Total	P 7.1 Million
Home improvement loans	
	P 4.8
Total	P 22.0 Million
<u>Sites and Services</u>	
Recoverable	
Development costs	P 9.0
Home improvement loans	P 1.6
Nonrecoverable 3/	
	P 1.2
Total	P 11.8 Million
Olongapo Total	(\$4.6 M) <u>P 33.8 Million</u>
Grand Total Both Cities	(\$8.2 M) <u>P 59.9 Million</u>

1/ All Olongapo lands are public and can be transferred by leasehold or freehold.

2/ Nonrecoverable costs include perimeter wall construction, land fill, terracing and surface drainage.

3/ Nonrecoverable costs include construction of 2 km. of access road.

Chapter I

OVERVIEW: DIMENSIONS OF THE SHELTER SECTOR PROBLEM

A. Overview of the Country and the Economy

Located about 600 miles southeast of mainland Asia, the Philippines archipelago is made up of 11 major islands and about 7,100 islets. The islands extend 1,000 miles between Taiwan on the north and Indonesia on the south. The land area of 115,707 square miles is slightly smaller than Japan and is divided into three geographical regions: Luzon (54,000 square miles), Visayas (25,000 square miles) and Mindanao (37,000 square miles). Sixty-five islands with areas exceeding 65 square miles make up 98 percent of the total area.

Of the total land area of 29.7 million hectares, 7.6 million are under cultivation and an additional 4.2 million are unused but potentially productive. The irregular coastline is twice as long as that of the United States. There are about a hundred natural harbors and landlocked straits. Manila Bay with an area of 770 square miles is the main port and the best harbor in the Far East. The topography of the Philippines varies from rugged mountain ranges and dense forests, which isolate some parts of the island, to fertile flatlands.

The archipelago is of volcanic origin with at least ten of the volcanos still active. Located within the Pacific seismic belt the Philippines are earthquake prone. While typhoons occur almost every year, they rarely reach the agricultural lands of Mindanao or the sugar lands of Negros and Southern Panay.

The climate is warm the year round. The mean monthly temperature from April to October is 81 degrees and during the cooler months of November to March is 78 degrees. The seasons in most of Luzon, including Manila vary more by rainfall than by temperature; the rainy season being from May to October. However, in Mindanao and the other southern islands, rainfall is distributed fairly evenly throughout the year.

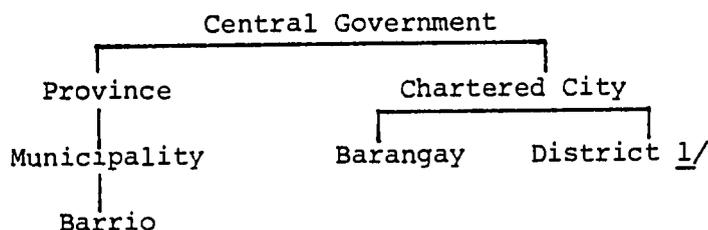
1. An Overview of Government Structure

The post independence system of government was very similar to the United States' with the executive power vested in the President, legislative power in the bicameral Congress and judicial power in the Supreme Court and the lower courts. However, the country has been under Martial Law since September 1972 and Congress has been disbanded since that time.

On January 17, 1973 a New Constitution was ratified establishing a parliamentary system of government with a National Assembly composed of as many members as may be provided by law to be apportioned among the provinces, representative districts, and cities in accordance with the number of their respective inhabitants and on the basis of a uniform and progressive ratio.

Administratively, the Philippines is divided into 72 provinces, 61 chartered cities, and about 1,440 municipalities and municipal districts. The districts include 34,000 barrios or barangays. There is a dual administrative heirarchy as shown in Figure 1.

FIGURE 1



1/ An administrative unit which lacks finance and internal government.

Local government units are closely supervised and tightly controlled by the national government. Lacking independent sources of funds they are also financially dependent on the central government. National government field agencies administer almost all governmental services. Although a Decentralization Act was passed in 1967 to promote the autonomy of local government units, local government revenues and expenditures as a percentage of combined national and local government revenues and expenditures declined between 1967 and 1974. Thus Tax Reforms instituted in 1973 have been ineffective in increasing local government financial autonomy. However, Presidential Decree 752 allows local governments to

borrow from public financial institutions for priority development projects such as housing, power plants, public markets, waterworks, irrigation, communication, and budgetary needs. Also included in PD 752 is a mechanism whereby the national government can obtain external resources and lend them to local governments.

Traditionally the provincial government has been considered the intermediary between the national government and the municipalities. In addition to supervising the municipal governments, provincial governments are responsible for the collection of taxes and the construction of highways, bridges, and public buildings. Until the passage of a referendum in February 1975 giving the President the authority to appoint all local officials, the provincial governor, provincial board and municipal mayor and councils were elected. Most of the other provincial officials including the treasurer, assessor, district auditor, register of deeds, Court of First Instance, superintendent of schools, district engineer and health officer are representatives of department and bureaus of the national government. The vice-governor and provincial board are under the executive authority of the governor.

The municipal governments are smaller than the provincial governments, having only a mayor, vice-mayor, council, treasurer, secretary, justice of the peace and police force. They are responsible for the local markets and public works. Traditionally each municipal councilor has been responsible for the supervision of a barangay. However, barangay captains have recently begun to exert more influence in the municipal councils.

Chartered cities are highly urbanized and independent from their provinces. These cities are governed by their charters while province municipalities are governed by the provincial and municipal codes as amended by the following acts and decrees: The Revised Administrative Code (1917), the Local Autonomy Act (1959), and the Decentralization Act (1967).

Up to 1975 the mayor and vice-mayor were both elected by the cities' voters for four year terms. Councilors were elected either at large or by the district while city department heads are still appointed by either the city mayor or national officials. All city charters are similar, the main difference being the number of departments. For example, Manila is the only city with a Department of Public Service specifically established in the charter. Other offices and agencies rendering services in the cities are extensions of national government bureaus and offices such as the city auditor and the city superintendent of schools.

Initially barrios or barangays were settlements of 30 - 100 families grouped around a road, source of water, natural shelters against wind and flood and located near good agricultural land. Under the present system of government they have limited powers of taxation for the development of the barrio and the enactment of local ordinances. Barrio assemblies are organized to elect a barrio captain and six councilmen for four-year terms. In 1973 the Barangay or Citizens Assemblies were created under Presidential Decree 86 with the idea of further increasing local participation in government. A Barangay-Secretariat under the Ministry of Local Government and Community Development (MLGCD) handles matters concerning the barangays.

2. Economic Situation

Macroeconomic Performance

The Philippines economy grew at an average annual rate of 5.5 percent during the 1960s, increasing to a 6 percent average in 1970-1975. There were, however, fluctuations within this period, demonstrating the sensitivity of the economy to the international market. From 1970 to 1972 the rate of growth was only 5 percent per year due to the effects of a balance of payments stabilization program initiated in 1970. Exports and imports of goods and services were about equal and public and private fixed investment represented 2 and 4 percent of GNP, respectively.

Growth Rate

The real growth rate of the Philippines GNP increased to 6.7 percent and 6.1 percent in 1976 and 1977 respectively. The leading sectors were manufacturing, particularly wood and cork products, beverage, chemicals, basic metal industries and metal products, and mining and quarrying. Agricultural growth declined from 7.9 percent in 1976 to 4.9 percent in 1977 due to declines in the output of wood products. The construction sector grew at a rate of 6 percent compared to a previous rate of 28 percent. The growth in this sector was due primarily to government projects while private and residential construction fell sharply. Employment growth was also moderate at 4 percent. The real wages of skilled laborers increased by 3 percent while those of unskilled workers declined by 2 percent. See Table 2 for a summary of key economic indicators.

TABLE 2

Summary of Key Economic Indicators

All values in US\$ million

Exchange Rates (Average for periods covered):

1975: US\$1.00 = P7.2746

1976: US\$1.00 = P7.4466

1977: US\$1.00 = P7.4000

Percent
Change d/

	1975	1976	1977	
<u>INCOME, PRODUCTION, EMPLOYMENT</u>				
GNP at current prices <u>c/</u>	15723.6 <u>r/</u>	17734.5 <u>p/</u>	20709.9 <u>a/</u>	16.0
GNP at 1972 prices <u>c/</u>	9424.7 <u>r/</u>	9826.2 <u>p/</u>	10490.3 <u>a/</u>	6.1
Per capita GNP, current prices <u>c/</u>	\$369.8 <u>r/</u>	409.0 <u>p/</u>	462.6 <u>a/</u>	12.8
Fixed capital formation on durable equipment, current prices <u>c/</u>	2211.3 <u>r/</u>	2167.8 <u>p/</u>	2397.7 <u>a/</u>	1.0 <u>e/</u>
Personal income, current prices <u>c/</u>	10470.0 <u>r/</u>	11576.4 <u>p/</u>	13291.2 <u>a/</u>	14.1
Indices: (1972=100)				
Mining	114.7	114.2	n.a.	--
Manufacturing	111.1	116.5	120.4 <u>i/</u>	3.4
Average Labor Productivity <u>f/</u>	185.0	201.2	n.a.	--
Average Industrial Wage	119.9	125.3	134.2	7.1
Labor Force (000 workers)	15161	16244	n.a.	--
Average unemployment rate (%)	3.6	5.0	n.a.	--
<u>MONEY AND PRICES</u>				
Money Supply <u>c/</u>	1416.9	1621.5	2018.7	23.7
Interest rate (%) <u>g/</u>	20.8	19.8		
Indices: Manila (1972=100)				
Wholesale prices	198.0	212.3	230.4	8.5
Consumer prices	164.6	174.8	188.6	7.9
<u>BALANCE OF PAYMENTS</u>				
Central Bank Gross Reserves	1360.7	164.7	1525.1	(7.1)
External public debt <u>h/</u>	2233.7	3137.1	3540.9	12.9
Annual debt service burden	423.0	474.0	756.0	58.9
Annual debt service ratio (%)	12.1	15.4	16.3	9.7
Balance of Payments	-520.8	-163.7	164.0	--
Balance of Trade	-1164.7	-1059.8	-763.9	27.9
Exports, f.o.b.	2294.5	2573.7	3150.9	22.4
U.S. share	654.8	915.3	1102.9	20.5
Imports, f.o.b.	3459.2	3633.5	3914.8	7.7
U.S. share	753.6	801.3	798.5	(0.3)

Main imports from US (1977): Materials imported on consignment basis for manufacture \$114.9M; Non-electrical machinery \$84.6M; Wheat and corn \$62.2M; Tobacco \$32.2M; Cotton \$27.7M; Motor vehicle parts & accessories \$23.4M; Hydrocarbons; carboxylic acids and derivatives \$20.9M; Electrical machinery \$20.9M; Internal combustion piston engines & parts \$20.3M; Miscellaneous chemical products \$15.7M; Paper and paperboard \$12.4M.

s/ Advanced estimates. r/ Revised. p/ preliminary.

c/ Base values converted to dollars using average exchange rate for the period.

d/ Percentage changes for data originally available in pesos were calculated using peso values.

e/ Change computed at constant 1972 prices. g/ 90-day prime lending rate.

f/ Net value added per employed person in manufacturing.

i/ Data available up to Sep 1977 only. h/ Outstanding as of year-end.

Data Sources: Central Bank, National Census and Statistics Office, National Economic and Development Authority, Department of Labor.

Table from Foreign Economic Trends and Their Implications for the United States. U.S. Embassy Manila, March 17, 1978.

Inflation

Externally generated price increases caused consumer prices to increase by 40 percent in 1974. Inflation was considerably lower at 7 percent in 1975 and 6 percent in 1976. In 1977 it accelerated to 7.9 percent in Metro Manila and 9.9 percent for the country as a whole. Food items freed from price control at the beginning of the year showed above average increases although this was counteracted by increased agricultural production so that total food inflation was only 7.5 percent. Non-food items exhibiting large price increases were services (20.7 percent), construction materials (12 percent), and wearing apparel (11.8 percent).

Balance of Payments

In 1973 there was a favorable turn in the terms of trade as the demand for traditional export commodities increased. Agricultural production increased simultaneously. A substantial current account surplus was registered and real GNP grew by almost 10 percent. An investment boom followed in 1975, with private and public investment representing 4 and 20 percent of GNP, respectively. The prices of the major export commodities declined in 1975, causing the terms of trade to drop by 23 percent and the current account deficit (which had been 3 percent of GNP) to grow to \$925 million, or 6 percent of GNP in 1975. In 1976-77 as the economy continued to grow at over 6 percent per year, the current account deficit was reduced from 6 to 4 percent (estimated) of GNP and the overall payments deficit was eliminated.

Then in 1977 exports hit an all time high of \$3 billion accelerating to a 22.2 percent increase from the 11 percent of the previous year. Growth was caused by a 20.6 percent increase in the volume of exports while overall export prices improved by only 1.5 percent. Export growth was led by coconut products (41 percent), mineral products (20.7 percent), and sugar (17.3 percent). Meanwhile import payments grew at only 7.7 percent and declined in real terms by 1.5 percent. The nonmerchandise trade deficit declined and transfer payments and net nonmonetary capital accounts maintained a positive balance. The above factors contributed to an overall payments surplus of \$164 million as compared to a deficit of \$161 million in 1976. There was however, a trade deficit of \$278 million.

The balance of payments surplus supported net repayments of \$143 million in Central Bank short-term loans. Central

Bank gross reserves were \$1,552 million at the end of 1977. Total outstanding external debt (at \$6,466 million) increased by 17.2 percent over the previous year and was equally divided between the public and private sectors. The U.S. Embassy estimates the debt service ratio for the year at 16.9 percent. According to World Bank predictions it could rise to 19 percent in 1982 and then fall back to 17 percent by 1985.

The major occurrence concerning external credit was the adoption in early 1978 of a new foreign borrowing scheme whereby the Central Bank will arrange consolidated loans for government agencies, government corporations and others having substantial government equity. Also permissible interest rates of foreign loans have been lowered.

1978-1982 Five Year Development Plan

A major focus of the 1978-1982 Five Year Development Plan is spreading industrial development to regions outside of metro Manila. Other goals include acceleration of the GNP growth rate from 7 percent to 8 percent; expansion of more productive employment opportunities; reduction of income inequality; greater self-sufficiency in food and energy; accelerated domestic resource mobilization to lessen dependence on external financing; and strengthening the balance of payments. 8/ Increased government investment in housing is also a priority in that P 12 is planned for new housing and squatter upgrading over the plan period.

3. Housing and Construction

The national accounts depict mixed trends for housing investments. Between 1971 and 1974 housing investment remained relatively static at about P 1.5 billion. By 1976, however, investment had increased to P 2.5 billion. As a share of GNP,

8/ Foreign Economic Trends and Their Implications for the United States. U.S. Embassy, Manila, March 1978.

housing investment declined from 2.9 percent in 1971 to 2.4 percent in 1974. This decline was the result of a tight credit situation and a significant rise in the price of construction materials during those years. Abatement of these conditions in 1975 and 1976 resulted in an upswing in housing investment, which by 1976 had increased to 3.6 percent of GNP.

Most of this investment originated in the private sector. Government investment in housing has been negligible. From 1970 to 1976 it hovered around P 5 million annually. ^{9/} During the plan period 1978-1982, however, Government investment is projected to increase substantially, averaging P 2.5 billion per annum. Over the plan period this total investment is expected to provide shelter for nearly 110,000 families. (See Chapter III).

Table 3 shows that the public sector share of gross domestic fixed capital formation (GDFCF) has been increasing since 1970. By 1976, as the result of large infrastructure programs, public sector expenditure had increased to 20 percent of GDFCF. During the six year period 1970-76, the construction share of GDFCF dropped to 35 percent in 1971, but by 1976 had recovered to 50 percent of total GDFCF. The residential portion of construction, however, has remained fairly constant at 38 percent. ^{10/}

4. Employment

Low interest rates, an over-valued currency, and fiscal advantages have favored production for the domestic market by capital intensive, large scale urban industries at the expense of medium and small scale industries and to some extent the rural sector. As the domestic market for import substitution

^{9/} Excludes government financing through the Government Service Insurance System and the Social Security System of houses built by the private sector.

^{10/} National Accounts Staff. National Economic Development Authority. Estimates as of May 1977.

TABLE 3

Gross Domestic Fixed Capital
Formation (GDFCF) At Current Prices
(Billions of Pesos)

	1970		1971		1972		1973		1974		1975		1976	
	P	%	P	%	P	%	P	%	P	%	P	%	P	%
Construction														
Government	0.4	6	0.6	7	1.0	12	1.4	14	2.9	16	4.4	16	6.4	20
Private	2.2	33	2.3	28	2.5	29	3.0	30	4.7	25	7.3	26	10.0	30
Total	2.6	39	2.9	35	3.5	41	4.4	44	7.6	40	11.7	42	16.5	50
Durable Equipment	4.1	61	5.3	65	5.3	62	6.6	66	11.1	60	16.1	58	16.3	50
Total GDFCF	6.7	100	8.2	100	8.5	100	10.0	100	18.7	100	27.8	100	32.8	100

SOURCE: National Accounts Staff, NEDA. Estimates as of May 1977.

neared saturation and the rate of growth in the rural sector continued to be slow, the overall economic growth rate decreased in the post 1960 period. This led to a limited growth in labor demand. Meanwhile population pressures in the rural areas caused increased rural/urban migration. Because of limited opportunities in the industrial sector, migrants from rural areas have been swelling the ranks of the commercial and service sector.

The service sector, a large part of which is informal, is second only to agriculture as the most important provider of jobs. During the 1960s the decline in the share of agricultural employment has been about the same as the expansion in service employment. 11/ Throughout the decade, an ILO study found two out of every three non-agricultural, non-government workers to be employed in the service sector. At present the informal sector accounts for 60 percent of total service sector employment and is an important source of employment for the low-income population in general and migrants in particular. In 1973 the service sector provided 67 percent of the jobs in urban areas, industry provided about 25 percent and the remainder were in agriculture. (By census definition many areas which are predominantly rural in character are considered urban. See appendix for Definition and Population of Urban Areas.)

Output per person in organized commerce is about six times higher than in unorganized commerce. For example, the wage differential between a general grocery store and a sari-sari is about four to one. 12/ The informal sector includes workers in repair and maintenance activities, small restaurants and barber shops, small transport and pedicab services, as well as servants, hawkers, messenger boys and street vendors.

Rapid growth of the population and the labor force is constraining efforts to obtain full employment and an equitable income distribution. Partially due to a government initiated family planning program, the population growth rate fell from 3.0 percent in 1970 to about 2.8 percent in 1975. While 20 percent of eligible couples practiced family planning in 1974, the rate in the rural areas has been much lower.

11/ ILO. Sharing in Development, 1974.

12/ Ibid.

However, due to the age structure of the population, a rapid decrease in the rate of population growth is extremely unlikely.

The World Bank estimates that the labor force is growing at an annual rate of 3.2 percent and will grow at 3.0 percent from 1980 to 1985. In spite of the decrease in growth rate, however, the absolute magnitude of the increment to the labor force will increase yearly. It will be necessary for the economy to generate 500,000 new jobs annually in order to keep the unemployment rate at 5 percent and 600,000 jobs annually to decrease unemployment (see Table 4).

From 1973-1976 employment increased by about 4.6 percent annually versus an average growth rate for the previous years of 2.4 percent. The growth of employment in the manufacturing sector was especially rapid. Following stagnation from 1970-1974 employment growth in manufacturing averaged 8 percent or 100,000 jobs per year from 1974 to 1976. This was partly due to the growth of labor intensive production for export.

In 1973 about 29 percent of employed persons were in urban areas. Since urban employment data first became available in 1965, urban employment has expanded at approximately the same rate as the labor force, about 3.5 percent per annum. As mentioned above, the growth was almost entirely in the formal and informal service sectors.

Ten percent of national employment is in the Metropolitan Manila Area (MMA); but unemployment there has tended to be higher than the national rate. Official data show that between 1965 and 1971 measured unemployment remained between 6 and 7 percent for the Philippines as a whole and declined within the MMA from 16 to 11 percent. Much unemployment in urban areas is temporary, however, as migrants often spend their initial weeks or months in the city looking for employment.

The structure of employment in the rural areas is changing. Between 1961 and 1971 the number of families engaged in nonagricultural activities grew by about 5.6 percent a year, while the number of families dependent on agriculture grew at only 1.7 percent. If the present trend continues, the proportion of the total rural population depending primarily on incomes from nonfarm employment would rise from about 35 percent in 1975 to 40 percent in 1985.

If the proposed government investment program is successfully implemented, the construction sector will have to grow at about 12 percent a year from 1975 to 1985. Thus, the sector could play a major role in job creation generating close to 100,000 jobs a year in the 1980s.

TABLE 4
Labor Force, Employment and Unemployment

Date	Working age population - million -	Labor force participation			Unemployment		
		rate %	Labor force - ----- million -----	Employment million	Unemployed -----	rate %	
1970 (census)	25.1	49.4	12.4	11.4	0.9	7.6	
1971	Feb.	25.3	48.6	12.3	11.6	0.7	5.4
	May	25.5	51.8	13.2	12.6	0.6	4.8
	Aug.	26.1	49.5	12.9	12.2	0.7	5.2
	Nov.	26.4	50.2	13.2	12.5	0.7	5.3
1972	Feb.	26.7	52.1	13.9	12.9	1.0	6.9
	May	26.7	53.1	14.2	13.2	1.0	6.9
	Aug.	27.0	49.7	13.4	12.6	0.8	6.1
	Nov.	27.5	48.4	13.3	12.6	0.7	5.4
1973	Feb.	27.5	49.0	13.5	12.8	0.7	5.2
	May	28.2	49.3	13.9	13.3	0.6	4.5
	Aug.	28.8	50.8	14.6	13.9	0.7	5.1
	Nov.	28.9	50.4	14.6	13.9	0.7	4.8
1974	Feb.	28.9	48.9	14.1	13.6	0.6	4.1
	May	28.8	52.9	15.2	14.5	0.7	4.8
	Aug.	28.8	49.4	14.2	13.6	0.6	4.1
	Nov.	28.8	49.7	14.3	13.8	0.5	3.2
1975	Feb./ <u>a</u>	29.0	49.3	14.3	13.8	0.5	3.6
	Aug.	29.8	51.0	15.2	14.5	0.6	4.2
1976	Aug./ <u>b</u>	31.4	51.8	16.2	15.4	0.8	5.0

/a In 1975 only two labor force surveys were carried out because of the 1975 census.

/b Only one labor force survey was conducted in 1976.

Source: National Census and Statistics Office, 1970 census and annual labor force surveys.

B. Human Settlement Patterns

In 1974 about 30 percent of the Philippine population lived in chartered cities and other urban areas (See Appendix 1 "Definitions and Population of Urban Areas"). Almost 40 percent of the total urban population is in the Metro-Manila Area (MMA), the remainder residing in a number of rapidly growing smaller cities. ^{13/} As shown in Table 5, the urban population has grown steadily from about 6.9 million in 1960 to about 10.0 million in 1970, an average annual rate of 4 percent. During the same period overall population increased from 27 to 37 million at an average annual rate of 3.0 percent. Outside the MMA, the fastest growth has been in cities of 100,000 or more. The population of these cities grew at 4.2 percent (vs. 5.0 percent in the MMA) leading to a doubling in their number during the 1960s. Meanwhile the population of smaller cities grew by an average of 3.2 percent.

As can be seen by the map, the urban areas are distributed throughout the major islands. However, there are significant economic and social disparities throughout the thirteen regions. The less developed regions of Ilocos, Cagayan, Bicol, Eastern Visayas and Central Visayas are less urbanized and have been experiencing slower rates of urban growth than the rest of the country. Luzon is projected to have the highest percent of urban population by the year 2000 with 58 percent of the population being urban (see Table 6).

The importance of migration to urban growth varies significantly among the urban areas. It is estimated that in the largest urban centers, including the MMA, migration accounted for about half the total population gain in recent years. Most of the migrants to the MMA settled in Manila City causing it to become the most densely populated area in the Philippines with 34,746 persons a square kilometer compared to 130 inhabitants per square kilometer for the country as a whole.

In the smaller urban areas natural increase accounts for approximately two-thirds of the growth rate while rural urban migration accounts for the other third. The natural rate of increase however was 2.6 percent in urban areas compared to 3.2 percent in the countryside in 1970 due to

^{13/} The population of the MMA in 1975 (5 million) was 11 times the size of Davao and 13 times the size of Cebu, the second and third largest cities, respectively.

TABLE 5
Urban Population: 1960 and 1970

Area	Population (In thousands)		Percent of Urban Population		Average Annual Growth Rate 1960-70
	1960	1970	1960	1970	
<u>Manila Metropolitan Area</u>	2,722	4,404	33.3	36.5	5.0
Manila City	1,139	1,331	13.9	11.0	1.6
Quezon City	398	754	4.9	6.2	6.6
Caloocan	141	274	1.8	2.3	6.5
Pasay	133	206	1.6	1.7	4.5
Others	906	1,839	11.1	15.2	7.3
<u>Major Chartered Cities</u> ^{b/}					
Davao	226	392	2.8	3.2	5.6
Cebu	251	347	3.1	2.9	3.3
Iloilo	151	200	1.8	1.7	3.4
Zamboanga	131	200	1.6	1.7	4.3
Bacolod	119	187	1.5	1.5	4.6
Basilan	156	144	1.9	1.2	-0.8
Angeles	76	135	1.0	1.1	5.9
Butuan	80	131	1.0	1.0	3.3
Cagayan de Oro	69	124	1.0	1.1	6.0
Cadiz	89	124	1.1	1.0	3.4
Batangas	83	109	1.0	1.0	2.8
Olongapo	45	108	1.0	1.0	9.2
San Pablo	71	106	1.0	1.0	4.1
Iligan	58	104	1.0	1.0	6.0
Other Urban Areas	3,841	5,246	47.0	43.5	3.2
Total Urban	8,168	12,071 ^{d/}	100.0	100.0	4.0
Adjusted Urban ^{c/}	6,861	10,140			4.0
Total Philippines	27,088	36,684			3.0

NOTES: a/ As defined by the Bureau of the Census and Statistics (BCS) in 1970. b/ Chartered cities with populations over 100,000 in 1970, excluding cities in the MMA. c/ For adjustment rationale and methodology, see Table 1, Chapter 4. d/ Based on 1960 definition of urban by the BCS. According to the 1970 census definition, the urban population was 11,668,000.

SOURCE: BCS, The Growth of the Urban Population in the Philippines and its Perspective (Manila, n.p. 1973), p. 23; Mercedes B. Concepcion, "110 Million by the Year 2001," Philippine Sociological Review (July-Oct 1970), p. 216, and Ernesto Pernia, "The Philippine Urban Structure," University of the Philippines Population Institute Research Note 25 (1974), Table 3; and Mission estimates.

PHILIPPINES MAJOR URBAN AREAS

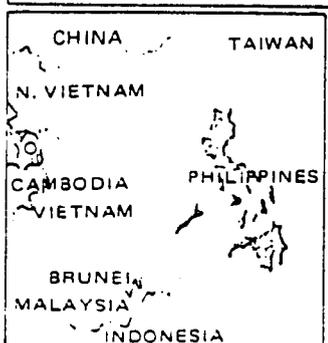
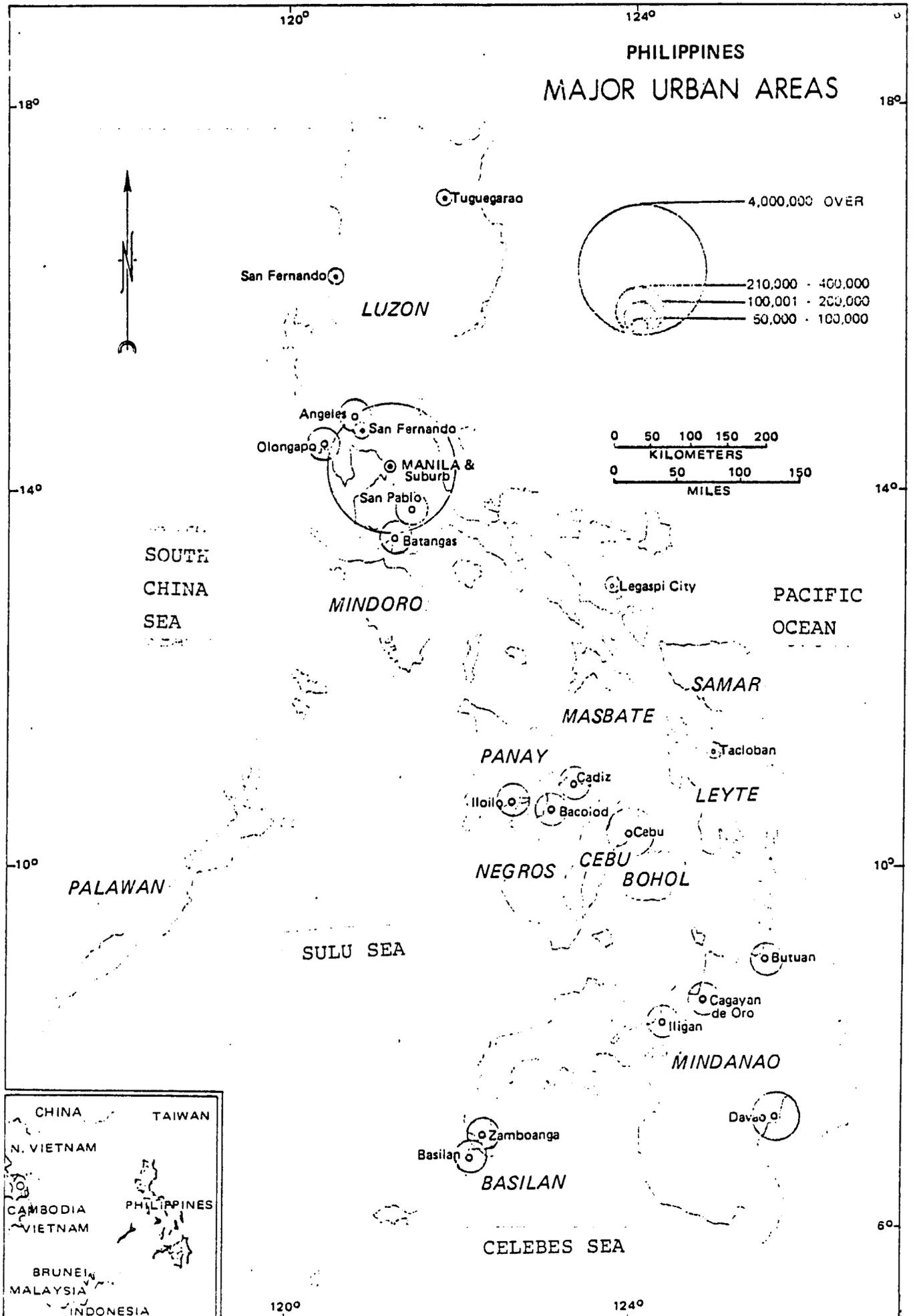


TABLE 6
Percent of Urban Population by Area

Area	Percent of Population				
	1948 <u>1/</u>	1960 <u>1/</u>	1970 <u>1/</u>	1985 <u>2/</u>	2000 <u>2/</u>
Philippines	26.6	30.3	32.9	39.1	46.0
Luzon	32.0	36.6	41.8	49.0	58.0
Visayas	20.7	25.1	25.6	31.0	37.0
Mindanao	21.1	21.2	19.1	24.0	28.0

NOTES: 1/ The Growth of Urban Population in the Philippines and It's Perspective Technical Paper No. 5, National Census and Statistics Office. 2/ Macro Sector, NEDA-RDS.

the rising age of marriage in the urban areas and the more rapid acceptance of family planning.

In order to slow the rate of migration to the already densely populated MMA, steps are being taken to develop alternative growth poles. For example, the USAID Rural Service Center Project, also called the City Development Assistance Program, is providing physical and social infrastructure in fifteen cities. These cities have developed as centers of trading, agricultural processing, marketing and industrial activity.

The government is also encouraging the expansion of large industries into areas outside Metro-Manila. To further decentralize industrial development, certain industries have been banned within a 50 kilometer radius of Metro-Manila. The Task Force on Human Settlements has identified thirty urban growth centers on the basis of existing infrastructure, services, political-administrative, and policy considerations.

A recent World Bank regional development study ranked urban growth centers according to five sets of criteria: population, land area, densification measured in projected percent change in persons per hectare between 1970 and 2000, population growth rate, and average municipal revenues between 1970 and 1974. The five sets of criteria are presented below.

Regional Development Study Criteria
For Ranking Urban Growth Centers

	Population	Land	Densification:	Growth Rate	Average Revenues
Range	Range	Area	Change in Per-	1970-2000	1970-1974
(1,000)	(1,000)	(1,000	sons/Hectare	(Percent)	(pesos millions)
		Hectare)	(1970-2000)		
A	100+	75+	3.9+	3.9+	7.0+
B	50-99	50-74	2.6-3.8	2.6-3.8	3.0-6.9
C	20-49	25-49	1.3-2.5	1.3-2.5	1.5-2.9
D	Under 20	Under 25	Under 1.3	Under 1.3	1.0-1.49

Table 7 summarizes the results of this classification according to the various regions. See Appendix 3 for the rating of each city.

As a result of this classification three types of urban growth centers emerged: regional or primary, subregional or secondary and tertiary centers.

TABLE 7
Urban Growth Centers

Urban Development Sector

	Metropolitan Areas	Regional Primary Type I	Sub-Regional Secondary Type II	Tertiary Type III
REGION I		Laoag+ Dagupan+ San Fernando*	BAGUIO*	DAGUPAN SAN CARLOS LAOAG
REGION II		Tuguegarao*		
REGION III		ANGELES OLONGAPO San Fernando+	CABANATUAN PALAYAN Angeles* Olongapo* Tarlac* San Jose*	SAN JOSE
REGION IV	MMA*+	MMA		
REGION IV-A		Batangas+ San Pablo+ Lucena+ Puerto Princesa+	BATANGAS* SAN PABLO* PUERTO PRINCESA LIPA*	CAVITE LUCENA TAGAYTAY TRECE MARTINES
REGION V		Legaspi*+ Naga+		IRIGA NAGA LEGASPI
REGION VI		Iloilo*+ Bacolod+	BACOLOD ILOILO CADIZ	BAGO ROXAS SILAY LA CARLOTA
REGION VII	Cebu*+	CEBU	TAGBILARAN Mandaup*	BAIS TOLEDO CANLON LAFU-LAFU MANDAU DUNAGUETTE
REGION VIII		Tacloban*+ Cattalogan+	CALBAYOG	OEMCC TACLOBAN
REGION IX		ZAMBOANGA*+	PAGADIAN DIOLOG	DAPIITAN
REGION X		BUTUAN+ CAGAYAN DE ORO*+	GINOOG OSMIS Butuan* Quezon*	CROQUIETA TANGUB SURIGAO
REGION XI	Davao*+	DAVAO GENERAL SANTOS*	Mati*	
REGION XII		ILIGAN Marawi+ Cotabato+	COTABATO Iligan*	MARAWI

Type I regional planning urban centers comprised of ten chartered cities, have populations of over 100,000. Their projected densification average 2.6 percent, while population growth is projected at 2.8 percent. Growing demand for land will be particularly a problem in Angeles and Olongapo. Characteristically, Type I urban centers have yearly average revenues of over 3 million. However the average revenue is over 7 million in half the cities and over 200 million in Metropolitan Manila.

Although the population in Type II urban centers ranges from 25,000 to over 100,000, the projected average rate of densification is lower than in Type I areas with all but four cities in the 1.3 to 2.5 percent range. Average population growth is also 1.3 to 2.5 percent per annum. However, the annual revenue of these urban centers is much less than Type I centers averaging 1.0 million to 1.5 million.

The majority of the 30 cities classified as Type III urban centers have populations between 20,000 and 49,000. Historically, population growth rates have been low and they are projected to be below 1.3 percent by the year 2000. With four exceptions, average incomes are under 1 million.

C. Housing Stock

The large and growing shortage of housing in urban areas of the Philippines, estimated by the "Five Year Philippines' Development Plan, 1978 to 1982" to equal a backlog of 981,000 households by 1977, has been caused by a number of interrelated factors, including the low levels of household incomes, high and rising costs of land and construction, a shortage of credit, and relatively inactive public sector involvement in construction and financing. In a 1972 study, the Presidential Assistance on Housing and Resettlement Agency (PAHRO) concluded that about 50 percent of the national housing shortage was concentrated in the Metropolitan Manila Area.

The 1960 and 1970 censuses show that while the total population increased by 3 percent per annum and households by 2.8 percent, the total number of dwelling units only increased by 2.4 percent per annum. In urban areas where population increases have been greater, averaging 5.0 percent per annum, the growth in housing stock has lagged behind at 4.5 percent. In smaller urban areas such as Olongapo and Angeles where annual population increases have averaged 9.2 percent and 5.9 percent, respectively, even greater housing stock deficiencies have occurred.

The total housing stock in 1970 was estimated to be slightly over 6 million units of which 30 percent were in urban areas (see Table 8). The bulk of these urban dwelling units were small, containing an average of 2.8 rooms. However, over one third of urban residential buildings (36 percent) in urban areas contained two or more dwelling units and housed more occupants (6.44 persons) than either the Philippines' average occupancy rate of 6.09 persons per dwelling unit or the rural average of 5.94. (See Table 9).

TABLE 8
Growth of Housing Stock

	Total	Urban	Rural
Total Number of Dwelling Units (1960)	4,790,954	1,014,861	3,776,093
Percent	100	21.2	78.8
Total Number of Dwelling Units (1970)	6,099,844	1,845,202	4,254,642
Percent	100	30.2	69.8
Percent Annual Increase 1960-1970	2.73	4.5	1.9

SOURCE: De Vera, Jacobo S. Housing Needs Up to the Year 2000 and its Financing Implications. NEDA Journal 1974-75, p. 41-53.

Overcrowding in urban areas due to migration is greater than either the national or rural indicators as there was an average of 1.10 nuclear families per dwelling unit in urban areas compared with 1.06 in rural areas (see Table 10). Furthermore, low-income areas of urban centers have much greater residential densities than surrounding urban areas. The low-income Tondo foreshore for instance has a gross residential density of 138 buildings per hectare. Densities in other areas of Metropolitan Manila vary considerably but are lower.

A variety of housing types are available in urban areas. However, over 64 percent in 1970 were single family dwellings. In urban centers, roughly 66 percent of households own the houses they occupy, but only 38 percent own both their own houses and the lot they occupy. By comparison in rural areas,

TABLE 9
Housing Occupancy Rates in
the Philippines, 1970

	Total	Urban	Rural
Number of Dwelling Units per Building			
One (%)	83.1	64.1	93.6
Two or more (%)	16.9	35.9	6.4
Type of Tenure			
Owner Occupied (%)	85.3	65.9	93.6
Rented (%)	10.5	28.2	2.9
Other (%)	4.2	5.9	3.5
Average Number of Persons Per Dwelling Unit	6.09	6.44	5.94
Average Number of Rooms per Dwelling Unit	2.42	2.79	2.26
Average Number of Persons per Room	2.52	2.31	2.63

SOURCE: National Census and Statistics Office.

TABLE 10
Housing Conditions in the Philippines, 1970

	Total	Urban	Rural
Total Number of Dwelling Units	6,099,844	1,845,202	4,254,642
Total Number of Households	6,163,128	1,884,291	4,278,837
Average Persons per Households	5.94	6.16	5.84
Average Number of Nuclear Families per Household	1.04	1.06	1.04
Average Number of Households per Dwelling Unit	1.03	1.04	1.02
Average Number of Families per dwelling unit	1.07	1.10	1.06
Average number of persons per dwelling unit	6.09	6.44	5.94

SOURCE: National Census and Statistics Office.

94 percent of households owned their own housing while 54 percent owned both the house and lot they occupy. 14/

The quality of housing and access to services are further indicators of the condition of the housing stock. In the Philippines as a whole, only 24 percent of households had access to piped water while only 22 percent had flush toilet facilities. In urban areas conditions are better as 54 percent of households had access to piped water and almost 50 percent had some form of flush toilet facility (see Table 11).

In addition to access to services, the condition and age of the housing stock determines the quality of housing. Census data dating from pre-war periods indicates that about 18 percent of urban housing is constructed of makeshift materials and light construction such as bamboo, thatch and others. Since these materials constitute severe fire hazards in dense urban areas they are prohibited by building ordinances. Nevertheless, this form of construction accounted for 23 percent of new urban housing between 1955 and 1970, most of it catering for low-income housing needs.

Since the structural condition of housing is dynamic, i.e. portions of the housing stock continually become uninhabitable due to poor maintenance, poor construction or changes in living patterns, the housing stock requires continual replacement. To avoid the devastating effects of natural disasters or fires, the rate of replacement of deficient housing stock should be gradual and continuous. In the Philippines since almost one quarter of urban housing is constructed of salvage or light construction materials, the need for replacement of existing housing stock in poor condition is an important contributor to total housing needs.

Table 12 shows a gradual method for replacement of housing stock based on the age of the housing and the expected life of each category of residential construction. Based on census data, it assumes that units constructed of bamboo and other types of light building materials will have a probable life of 20 years, units constructed of wood, 50

14/ NCSO, Census of the Philippine Population and Housing: Summary, Vol. II, 1960; and NCSO "Metropolitan Manila" (Manila, January 1973).

TABLE 11
Quality Indicators of Dwelling Units, 1967
(In Percent)

Indicator	All Philippines	Urban	Rural
<u>Lighting used</u>			
Electricity	22.9	62.8	5.8
Kerosene pressure lamp	14.2	10.7	15.8
Other Kerosene lamp	57.7	24.1	72.1
Others	5.2	2.3	6.4
Not reported	0.1	0.1	
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>Source of Drinking Water</u>			
Water works	22.9	54.3	8.6
Communal drilled wells	15.9	15.6	16.8
Private drilled wells	11.4	13.5	10.5
Closed well with pump	11.5	6.7	13.5
Open well	21.3	6.9	27.4
Spring	11.5	0.8	16.1
Creek, stream, river irrigation	4.4	0.6	6.0
Rain water	1.3	1.5	1.2
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>Toilet Facilities</u>			
Water sealed <u>a/</u>	12.8	34.0	3.7
Cement bowl <u>b/</u>	7.2	14.1	4.2
Closed pit	26.9	21.4	29.3
Open pit	17.6	9.4	21.2
Public toilet	1.7	3.8	0.8
Pail system	0.3	1.1	
None	33.2	16.0	40.7
Not reported	0.2	0.1	0.2
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>Type of Tenancy</u>			
Both house or building and lot owned	49.3	37.9	54.2
House or building owned; lot free or squatted on	28.9	17.4	33.8
House or building owned; lot rented	11.1	18.6	7.9
Both house or building and lot free of charge	4.6	6.7	3.6
Both house or building and lot rented	6.0	19.3	0.3
Not reported	0.1	0.1	0.2
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

NOTES: a/ Enamel or cement bowl with seat. b/ Set level with the floor, without a seat.

SOURCE: "Living Quarters in the Philippines," Journal of Philippine Statistics, Vol. 19, No. 3, (July-September 1968), pp. ix-xxiii.

TABLE 12

Dwellings by Age, Construction, Materials,
and Replacement Needs, 1970

Period	URBAN				RURAL			
	Concrete	Wood/GI	Bamboo and Others	Total	Concrete	Wood/GI	Bamboo and Others	Total
Prewar	17,740	75,431	8,143	101,314	5,437	62,073	29,946	97,456
1942-44	3,668	19,084	3,379	26,131	1,450	20,918	17,435	39,803
1945-54	56,069	248,534	39,398	344,001	14,087	239,503	174,580	428,170
1955-64	135,910	419,767	105,748	661,425	43,711	645,560	707,174	1,396,445
1965-70	<u>158,940</u>	<u>386,839</u>	<u>166,552</u>	<u>712,331</u>	<u>90,431</u>	<u>784,729</u>	<u>1,417,608</u>	<u>2,292,768</u>
Total All Dwellings	372,327	1,149,655	323,220	1,845,202	155,116	1,752,783	2,346,743	4,254,642
Replacement Needs Over 10 years								
(Number)	55,849	322,267	193,932	572,048	15,512	262,917	1,408,046	1,686,475
(Percent)	15 <u>1/</u>	28 <u>2/</u>	60.0 <u>3/</u>	31	10	15	60	40
Annual Required Replacement Rate (%)		2.8	5.0	3.1	1.0	1.5	6.0	4.0

NOTES: 1/ Based on an estimated life of 70 years. 2/ Based on an estimated life of 50 years. 3/ Based on an estimated life of 20 years plus 100 percent of housing built prior to 1955.

SOURCE: De Vera, Jacobo S. "Housing Needs Up to the Year 2000 and Its Financial Implications." NEDA Journal of Development, Vol. I & II. Manila, 1974-75, p.53.
Replacement Needs: PADCO analysis.

years, and housing constructed from concrete, 70 years. ^{15/} As a result over a ten year period, roughly 31 percent of the housing stock will require replacement. Annually therefore, about 3.1 percent of the urban stock should be replaced and included in annual projects of housing needs.

Information about new residential construction since the 1970 census is scanty. However, based on building permit applications, an estimated 5,400 new construction starts were made during the first seven months of 1976. As shown in Table 13, there is a large variation in unit construction costs in different areas of the Philippines. For instance unit construction costs in Manila are 480 percent greater estimated construction costs in the Philippines as a whole. This factor is a major contributor to the shortage of urban housing and necessitates the usage of lower quality construction materials for urban low-income housing.

D. Housing Needs

Projections of total housing needs in urban areas of the Philippines vary considerably although the methods of determining housing needs are similar. The "Five Year Development Plan" estimates a total urban housing backlog of 191,000 households in 1977. ^{16/} De Vera, writing in the NEDA Journal, estimates the total urban housing need for the five year period 1975-1980 to be 708,000 units or annually about 142,000 units. The De Vera calculation bases housing needs on an estimate of the backlog of urban households constituted of multiple family households and housing in poor conditions, i.e., housing constructed from salvage materials or where the occupants do not have tenure. Future housing needs are estimated from new household formation resulting from population increase and the need to replace existing housing stock. ^{17/}

^{15/} Given current population growth characteristics, the costs of construction and land and low urban incomes it is unlikely that all construction from less permanent materials can be eliminated. These housing replacement rates therefore assume that a portion of housing will continue to be built of such materials for some time.

^{16/} Five Year Development Plan.

^{17/} De Vera, Jacobo S. "Housing Needs up to the Year 2000 and its Financing Implications." NEDA Journal of Development. National Economic and Development Authority of the Republic of the Philippines. Manila, 1974-1975, pp. 44-55.

TABLE 13
 New Building Construction,
 January-July 1976
 (Residential Construction Only)

	Number	Floor Area (m ²)	Value (P1,000)	Unit Value (P/m ²)
Philippines				
January-June	5,417	1,718,586	257,730	150
July	1,767	1,178,622	80,856	69
Region III	186	18,793	5,941	320
Bataan	22	1,794	638	360
Pampanga	45	4,031	1,195	300
Zambales	4	295	88	300
Region IV	679	90,524	58,755	650
Region IV-A	494	76,785	54,977	720
Manila	64	12,542	10,893	870
Rizal	430	64,243	44,084	690

NOTE: Based on proposed date of construction, floor area and value of construction as estimated by building permits issuing officer.

SOURCE: Journal of Philippine Statistics.

Housing need estimates by the SSA Team fall between the foregoing two estimates at about 348,000 urban households in 1978 (see Table 14). These estimates are based on housing trends shown in the previous section, e.g., household characteristics, replacement needs, housing occupancy rates, and population trends. At current building rates (in urban areas a yearly increase of housing stock of 4.5 percent) these housing needs are projected to continue to increase unless there are changes in population growth trends. Furthermore, roughly half of the projected housing needs in the Philippines for the 15 year period shown are in urban areas. This fact is largely due to the more rapid urban population growth rate and the concentration of roughly 43 percent of the multiple family households in urban areas. 18/

The National Census and Statistical Office (NCSO) has made two projections of the urban population growth rate based on previous census data. The first projects that urban population growth rates will slow to an annual increase of about 2.5 percent, while the second projects a more rapid rate of urban population increase of about 3.4 percent. The 1960-70 urban population growth rate was 4.0 percent. The NCSO also projects that urban household sizes will decrease slightly approaching the national average household size. Table 12, indicates that if these demographic changes occur, net housing needs will be reduced by about 14 percent by 1985.

18/ Ibid. De Vera.

TABLE 14
Estimated Housing Needs

Year	Housing Need Based on 1970 Population Trends										Urban Housing Needs Based on Reduction in Household Size and Population Growth Rate ^{3/}				
	Population ('000)		New House-holds ('000)		Household Size		Total Housing Needs ('000) ^{1/}		Net Housing Needs ('000) ^{2/}		Urban Population ('000)	New House-holds ('000)	House-hold size	Total Housing Needs ('000)	Net Housing Needs ('000)
	Total	Urban	Total	Urban	Total	Urban	Total	Urban	Total	Urban					
1970	27,088	12,071									12,071				
1971	27,900	12,553	130.8	78.6	5.94	6.16	690	336	576	250	12,553	78.3	6.16	335	250
1972	28,738	13,055	141.0	81.8			693	349	587	260	13,055	81.5	6.16	346	260
1973	29,599	13,578	145.1	85.1			702	361	599	272	13,578	84.8	6.16	359	271
1974	30,488	14,121	149.5	88.5			712	374	612	283	14,121	88.2	6.16	372	283
1975	31,402	14,686	153.9	92.0			722	387	624	295	14,686	91.7	6.16	385	295
1976	32,344	15,274	158.6	95.7			733	400.8	638	308	15,126	71.9	6.13	376	285
1977	33,314	15,885	163.4	99.5			744	415	652	321	15,580	74.0	6.13	386	294
1978	34,314	16,520	168.3	103.5			756	430	666	334	16,048	76.3	6.13	397	304
1979	35,344	17,180	173.3	107.6			769	445	681	348	16,529	78.9	6.10	409	315
1980	36,404	17,863	178.5	111.9			782	461	696	363	17,025	81.3	6.10	420	325
1981	37,496	18,582	183.9	116.4			795	478	712	379	17,536	84.2	6.07	433	337
1982	38,621	19,326	189.4	121.1			824	493	729	395	18,062	86.7	6.07	445	347
1983	39,780	20,099	195.3	125.9			839	513	746	411	18,604	90.3	6.00	462	363
1984	40,973	20,903	200.9	130.9			855	531	763	428	19,162	93.2	6.00	474	374
1985	42,202	21,739	206.9	136.2			872	550	782	446	19,737	97.4		494	393

Based on the Following Housing Characteristics:	Growth of Housing Stock	Average Number of Families per Household	Replacement Rate of Deficient Housing	Number Multiple-Family Households	Population Growth Rates
Total	1.9% P.A.	1.04	3.7	1.07	3%
Urban	4.5% P.A.	1.06	3.1	1.10	4%

NOTES: ^{1/} Total housing needs at the beginning of the year due to new household formation, housing backlog and replacement needs. ^{2/} Housing needs net of projected supply of housing at current construction rates, i.e., total housing stock increasing 1.9% per annum while urban stock increasing 4.5% per annum. The housing supply used is net of deficient stock. ^{3/} Based on one of two sets of NCSO predictions. See previous discussion (page 42).
SOURCE: NCSO and PAICO analysis.

Chapter II

CHARACTERISTICS OF THE POPULATION

Low income groups in urban areas of the Philippines are characterized by a lack of regular employment, inadequate housing and a low level of publicly provided services. There is a greater concentration of employment in informal sectors and a higher percentage of unemployment than found in the population as a whole. Further, low income residents of slum settlements complain of the lack of water, roads, and sanitation facilities. Table 15 illustrates some of the characteristics which can be used for identifying target populations in the Philippines. Public utilities, housing conditions, finance, and human capacity are further expanded in separate sections of the SSA.

In general, despite the economic and social disadvantages which frequently mark the poor in Philippine cities, squatters and slum dwellers consider their present lives better than their former situations. Those making such positive assessments of their present living conditions ranged from 86 percent of respondents in a survey of Baguio to 51 percent in Manila, where the least satisfaction with living conditions was found.^{19/}

A. Economic Characteristics

1. Household Income and Expenditure

The primary sources of information about incomes and expenditure patterns in the Philippines are surveys conducted by the National Census and Statistics Office (NCSO) in 1957, 1961, 1965, and 1971. Total family income in the Philippines increased about 4.7 percent per annum during 1961-71, while

^{19/} Aprodicio L. Laquian, "Slums and Squatters in Six Philippine Cities," Final report on a research grant from the Southeast Asia Development Advisory Group (New York: SEADAG, March 23, 1972, p. 70).

Table 15

Target Population Identification and Needy Population Identification

	Philippines	Metro Manila	Other Urban Areas	All Urban Areas	Olongapo	Angeles
<u>Household Income</u>						
Median	P 2,454	P5,502 (1971)				
Average	3,736	7,785 (1971)				
Threshold per capita income (1971)	650	870	700	n.a.		
Percent population earning less than threshold		32.8	28.2	30.0		
Household expenditure on housing	9.4%	18.0%	9.9%	12.5%		
<u>Control of Capital Assets</u>						
Home rented, free or squatted	15.0%	19.0% (squatters only)		34.0%	56.0%	
Home and plot owned	49.3%			38.0%	44.0%	
<u>Access to Credit</u>						
Percent population served by formal markets	14.0%	22.0%		14.0%		
<u>Vulnerability</u>						
Access to water, pipe borne	24.0%			54.0%	78.0%	42.0%
Sanitation				4.0%		
Water borne systems (treated)				48.0%	65.0%	43.0%
House systems (flush toilets)				63.0%	77.0%	84.0%
Electricity	23.0%			17.0%	5.0%	9.0%
Housing constructed of "light" materials	41.0%					
Health services						
Number of hospital beds per 1,000 people	1.28	3.05				

SOURCE: National Census and Statistical Office and World Bank data.

Table 15 (continued)

Needy Population	Per Capita Income Groups (pesos)			
	0-400	400-799	800-1,499	1,500+
<u>Daily Diet</u>				
Caloric intake	1,850	2,077	2,334	2,642
Protein Consumption	44g	51g	58g	70g
Undernourished group		33.8%		
<u>Life Expectancy at Birth</u>				
Infant mortality per 1,000 live births		80		

SOURCE: National Census and Statistical Office and World Bank data.

urban incomes increased at about 5.5 percent per year. Thus, while the 1971 average family income was P 3,736, the urban average family income was P 5,867.^{20/} A distribution of family incomes in 1971 and 1965 is given in Table 16. While incomes in current prices have been increasing, inflation has eaten into these gains. The ILO in a 1974 employment mission to the Philippines found very little real growth in incomes since 1956. Urban incomes in real prices had increased only 11 percent while the urban index of incomes had actually dropped from 133 to 111 between 1965 and 1971. See Table 17.

The distribution of incomes in urban areas has improved since 1961; however, as the percent of total family income earned by the lowest 40th percentile increased from 10.3 percent in 1961 to 14.0 percent in 1971. During the same period, the percentage of total family income going to the top 10th percentile decreased from 40.9 percent to 33.4 percent.

Since income surveys tend to suffer from problems in reporting income, a better assessment of household incomes can probably be obtained from household expenditure patterns. Urban household expenditure among the lower 40th percentile increased somewhat from about 15 percent of total expenditure in 1961 to almost 17 percent in 1971. During the same period, the upper 10th percentile's share of total expenditure dropped from 31 percent to about 27 percent, both indicating some improvement in income distribution, but not a major redistribution (see Table 18). Food continued to be the largest single consumer expenditure requiring an average of 54 percent of all family expenditure. Housing, the second largest recipient of urban family expenditure accounted for about 18 percent of total expenditure (see Table 19).

While it is apparent that urban incomes are higher than rural incomes, there are significant portions of urban populations earning less than the minimum income per capita ^{21/}

^{20/} These surveys are somewhat suspect due to the problems of understatement of income which may distort these trends. The 1956, 1961, and 1965 surveys are believed to contain errors of about 25 percent, while the 1971 surveys might have errors due to understatement as great as 35 percent. Private consumption expenditure surveys were more accurate as the error due to understatement is thought to be roughly 17 percent in 1971.

^{21/} Per capita income is determined by dividing family income (household income) by the number of adults per household.

Table 16
Family Income Distribution, 1965 and 1971

Region	Families		Income		
	Number (thousands)	Percent	Amount (thousands of pesos)	Percent	Average (pesos)
PHILIPPINES	6,347	100.0	23,714,284	100.0	3,736
Manila and suburbs Region III	525	8.3	4,085,629	17.2	7,785

1971

Income class	Total families	Metropolitan Manila	
Total (thousands)	6,347	525	
Percent	100.0	100.0	Region III
Under P500	5.2	0.2	
P500 to P999	12.1	0.9	
P1,000 to P1,499	12.2	1.7	
P1,500 to P1,999	11.8	4.0	
P2,000 to P2,499	9.6	6.9	
P2,500 to P2,999	8.1	3.6	
P3,000 to P3,999	12.5	15.3	
P4,000 to P4,999	7.5	10.9	
P5,000 to P5,999	5.0	7.6	
P6,000 to P7,999	6.4	13.3	
P8,000 to P9,999	3.6	9.1	
P10,000 to P14,999	3.7	12.2	
P15,000 to P19,999	1.1	4.3	
P20,000 and over	1.3	4.9	
Median family income (pesos)	2,454	5,502	
Average family income (pesos)	3,736	7,785	

1965

Income class	Total families	Metropolitan Manila	
Total (thousands)	5,126	458	
Percent	100.0	100.0	Region III
Under P500	11.6	0.3	
P500 to P999	17.7	2.4	
P1,000 to P1,499	16.7	5.3	
P1,500 to P1,999	13.5	3.0	
P2,000 to P2,499	9.9	11.9	
P2,500 to P2,999	7.6	9.9	
P3,000 to P3,999	8.9	14.8	
P4,000 to P4,999	4.6	10.3	
P5,000 to P5,999	2.8	7.3	
P6,000 to P7,999	2.5	7.7	
P8,000 to P9,999	1.5	6.3	
P10,000 and over	2.6	14.3	
Median family income (pesos)	1,646	3,720	
Average family income (pesos)	2,641	6,590	

Table 17

Indicators of Income Distribution 1956, 1961, 1965, and 1971

	1956			1961			1965			1971		
	Total	Rural	Urban									
Mean Income (current pesos)	1,471	989	2,427	1,804	1,203	2,970	2,541	1,755	4,405	3,736	2,818	5,867
Index, Current Price	100	100	100	123	123	123	173	178	182	254	285	242
Index, Fixed Price	100	100	100	111	110	111	126	130	133	117	132	111

SOURCE: International Labour Office. Sharing in Development, A Program of Employment Equity and Growth for the Philippines. International Labor Office. Geneva: 1974. p. 10-11.

Table 18
Distribution of Family Income and Household Expenditures
in All Philippines and Urban Areas

Family Income Group	1957		1961		1965		1971	
	Total	Urban	Total	Urban	Total	Urban	Total	Urban
	<u>Percentage of Total Family Income</u>							
Lowest 20 percent	4.5	4.5	4.2	3.8	3.5	3.8	3.7	4.6
Second 20 percent	8.1	8.0	7.9	7.5	8.0	8.0	8.2	9.4
Third 20 percent	12.4	12.2	12.1	12.5	12.8	12.0	13.2	13.4
Fourth 20 percent	19.8	20.0	19.3	19.5	20.2	18.7	21.0	21.9
Top 20 percent	55.1	55.3	56.4	57.1	55.4	57.5	53.9	50.7
Top 10 percent	39.4	39.6	41.0	40.9	40.0	41.7	36.9	33.4
	<u>Percentage of Total Household Expenditures</u>							
Lowest 20 percent	5.04	n.a.	5.98	5.09	5.65	5.24	5.92	6.2
Second 20 percent	9.03	n.a.	10.32	9.78	10.25	9.67	10.18	10.52
Third 20 percent	13.02	n.a.	14.68	14.56	14.57	14.41	14.76	15.68
Fourth 20 percent	20.03	n.a.	21.03	22.36	21.10	21.37	21.98	24.59
Top 20 percent	52.88	n.a.	47.98	48.22	48.43	49.31	47.16	45.23
Top 10 percent	35.42	n.a.	31.66	31.09	32.49	32.73	30.81	26.79
Top 5 percent	23.38	n.a.	21.00	18.73	21.43	18.80	19.37	16.50
Gini coefficient	0.48	0.49	0.50	0.52	0.51	0.53	0.49	0.45

SOURCE: BCS, Family Income and Expenditure Surveys for 1957, 1961, 1965, and 1971.

Table 19
Family Expenditures, 1971
(in percent)

Expenditure Item	Total Family Expenditure	P 500 to P 2,999	P 3,000 to P 5,999	P 6,000 and over
Food	53.7	63.6	54.7	42.5
Clothing	6.2	5.4	6.4	6.6
Housing and furnishing	17.7	14.1	16.6	22.6
Recreation and personal care	5.2	3.9	5.2	6.8
Education, trans- portation, and communications	6.6	3.6	6.5	9.6
Miscellaneous	<u>10.6</u>	<u>9.5</u>	<u>10.6</u>	<u>11.9</u>
Total	100.0	100.0	100.0	100.0

Source: BSC and Jacop S. deVera, "Housing Need up to the Year 2000 and Its Financing Implications," NEDA, National Conference on Housing, Development Academy of the Philippines (Tagaytay City, October 19-21, 1973).

required to maintain a minimum adequate diet. As indicated by the 1971 median family income (P 2,454), there are substantially large numbers of low income earners who have incomes below this threshold.^{22/} In Metropolitan Manila an estimated 33 percent of the population earns less than the minimum threshold income required to purchase minimum daily diets. In other urban centers the situation is marginally better as about 28 percent of the population earns less than the threshold income (see Table 20).

Table 20
Threshold Income Required
to Maintain a Minimum Daily Diet

	Philippines	Metropolitan Manila	Other Urban Areas	All Urban Areas
Threshold Income per Capita	P650	P870	P700	n.a.
Population Earning Less than Threshold (thousands)	n.a.	1,525	2,230	3,755
Percentage of Population Below Threshold	n.a.	32.8%	28.2%	30.0%

SOURCE: World Bank estimates, NCSO, Family Income and Expenditure Survey, 1971.

^{22/} Based on the expenditure patterns observed in the Family Income and Expenditure Survey conducted by the BCS in 1971, roughly 66 percent of family expenditure is devoted to food. To maintain a minimum diet of 1,913 calories daily, expenditure of P 432 per person on food required which implies a minimum per capita income of P 650. Since the cost of living is higher in urban areas, higher minimum threshold per capita incomes are required to maintain similar minimum diets.

As the median family income in Region III, which includes the AOP area, was P 3,188 in 1971, there is likely to be a substantial portion of the population earning less than the threshold income. For example, the average household in Olongapo is 5.41 persons for which a family income of about P 2,000 is required to provide a minimum daily diet.

2. Access to Credit

The lack of access to formal credit sources characterizes much of the Philippines urban poor. It has been estimated that only 14 percent of urban families, i.e., those having annual incomes of P 10,000 or greater, can afford housing at current market prices in the private sector. ^{23/} The situation is slightly better in Metropolitan Manila where an estimated 22 percent of the households have incomes in excess of P 10,000. However, in low income areas such as the Tondo Foreshore, approximately 45 percent of the households earn less than the national average income (P 3,746). In Region II where the average household income in 1971 was P 4,127, less than six percent of households meet the above criteria.

3. Control of Capital Assets

The percentage of urban homeowners, i.e. those who own both their dwelling and lot, is roughly equal to the percentage of urbanites who rent or illegally occupy their dwelling, about 38 and 34 percent, respectively. In some urban areas outside Metro Manila, even higher percentages of household own their own houses, such as in the city of Olongapo where 56 percent are homeowners. Low income areas are characterized by a lack of tenure and the "illegal" occupancy of public lands. These settlements can be characterized as being located on dead-end streets, river banks, and public spaces due to the lack of urban land as well as being located in densely packed homogeneous areas.

^{23/} Op. cit. DeVera. p. 58-59.

4. Physical Vulnerability

Directly related to housing and overall land use is the provision of public services, including social and physical infrastructure. In 1970, only half of the urban dwellings had piped water supplies, a fifth electricity for lighting, and a tenth had some form of flush toilet. Urban growth, thus, appears to have outpaced these services, and there is not a set pattern for administering them. Many variations in the provisions of services exist among jurisdictions depending on the financial and technical resources available, historical precedent, and political factors. Furthermore, disparities in public service levels exist within jurisdictions. Large segments of the urban poor areas are without pipe borne water supplies and in many areas where there is water supply, negative pressures exist in portions of the distribution system resulting in contamination of potable water supplies.

In 1975, not a single municipality in the country was completely sewerred. Many districts relied principally on individual systems or discharged effluent directly into nearby water courses. Many low income areas are characterized by the very poor environmental conditions which have resulted in severe health problems.

5. The Needy Population

Large segments of the urban population in the Philippines can be classified as "needy" under the USAID criteria for income, nutrition, and life expectancy. Roughly thirty percent of Metropolitan Manila's population and over 28 percent of the urban population in other areas earn less than the minimum P 870 per capita per annum to maintain minimum daily diets of 1,913 calories. An estimated 34 percent have diets which are deficient in caloric intake and are classified as undernourished. Furthermore, studies conducted by E.D. Dosayla of the Philippine Office of Agriculture indicate that due to the erosion of real incomes since 1970, diet deficiencies among low income groups have increased as both caloric and protein intake have decreased. 24/

24/ E.D. Dosayla. Income and Food Consumption (Summary of Nine Economic Surveys). Quezon City: Office of the Secretary of Agriculture, Special Studies Division, 1975.

B. Social and Cultural Characteristics

Several studies of shelter related socio-economic characteristics of the low income urban population in the Philippines have been conducted. While the conclusions drawn from any area-specific survey cannot automatically be transferred to other areas, some general insights can be gained into the lifestyles of low income urban dwellers.

Davao, subject of an in-depth intertemporal (1972 and 1974) survey by the Davao Action Information Center ^{25/}, can be considered a microcosm of Philippine society. Located at the opposite end of the country from Manila, it is a secondary city and typical regional growth pole. The economic base is diversified, including large industries such as timber processing and cement manufacturing and a productive agricultural hinterland. However, in contrast to the Philippine economy, manufacturing is export-oriented and uses local raw materials only. In 1974 the median household income was P 343 per month. Since the median household size is 6.3 persons, 50 percent of the population was subsisting on less than two pesos (or 28 US cents) a day. This is below the World Bank defined level of absolute poverty. In addition, the real income in Davao dropped between 1972 and 1974, with purchasing power losses equal to one-third of the mean city-wide income of 1972 reported for 1974.

1. Financial Priorities

In Davao upper income households predominate as renters while in lower income areas owner-occupancy of dwellings was most frequently encountered. This is because low and middle income families are more likely to be squatters and report themselves as homeowners. Owning a one or two room dwelling was less expensive than renting, even though the rate for comparable quarters at the time was a modest P 25 per month. Although money rents remained constant between 1972 and 1974, home ownership (squattling) increased, especially among low income households, as real incomes decreased. The extent of this can be seen in Table 21.

^{25/} Davao Action Information Center, "Fallout from the Poverty Explosion: Economic and Demographic Trends in Davao City, 1972-1974." Monograph No. 2. Davao City, 1975.

Table 21
Home Occupancy by Economic Class: 1972 and 1974
(Percent)

	Lower Class		Middle Class		Upper Class		Totals	
	1972	1974	1972	1974	1972	1974	1972	1974
Owner								
Occupied	50.7	67.2	43.6	53.1	30.2	35.7	42.5	53.8
Rentals	34.5	24.8	44.2	37.4	53.9	52.0	43.2	36.5
Administered	7.4	4.0	9.0	6.4	13.7	4.7	9.7	5.0
Other	7.4	4.0	3.3	3.1	2.1	7.6	4.5	4.7

Tabulation of estimated sales prices of housing units occupied in 1972 and 1974 shows that the value of owner-occupied units dropped as former renters became owner-occupiers of lower cost units. The estimated sale price of occupied low income dwellings declined from a mean of P 3,175 in 1972 to P 2,521 in 1974. As real income declined, rental as a portion of mean monthly income also declined as shown in Table 22.

Table 22
Mean Rental as Proportion of Mean
Monthly Income By Economic Class:
1972 and 1974

	1972		1974	
	Rental as % of Income	% of All Households Renting	Rental as % of Income	% of All Households Renting
Lower Class	7.9%	34.5%	5.5%	24.8%
Middle Class	8.9	44.2	8.6	37.4
Upper Class	10.2	53.9	10.4	52.0
Total Population	10.0%	43.2%	9.3%	36.5%

The drop in income was further reflected in the amount spent on utilities. No new households obtained electricity; cooking fuel expenditures were drastically reduced and there was a drop in the utilization of safe sources of domestic water. No improvements were made in the methods of disposal of sanitary waste.

As income fell the percentage of monthly expenditure at the city's markets increased particularly among the upper class, probably reflecting a shift from the western supermarkets to the traditional food bazaar where quality is lower and there is less variety but the prices are lower.

It can be seen from the foregoing that when funds are scarce, housing is not a priority expenditure beyond providing some protection and privacy. Based on the findings of the study, the income utilization patterns of the three major income groups vis a vis housing and other consumer durables is summarized as follows: 26/

1. The income conservation strategy of the lower class rests on under-consumption of all durable goods. Lower class families eliminate housing costs from their budgets, do without electrical appliances, and purchase no property.

2. The income production strategy of the middle and upper classes is similar, but with a shift in emphasis.

- a. Middle income districts pay twice as much for housing as the poor but they are under-consumers of appliances and vehicles. Savings thus obtained may be applied to the purchase of small businesses, but not real estate.
- b. Upper income districts forego home purchases and spend only a slightly larger portion of income for housing than the poor. By under-consumption of housing, more substantial savings may be applied to both 1) purchase of small businesses proportionately equal to those of the middle class; 2) plus an equal number of investment properties of much greater value.

The findings in Davao are corroborated by the Keyes and Roldan Burcroff study in Metropolitan Manila. 27/ In this survey food was found to be the most urgent need and capital for a small business which could provide income to meet basic needs of the second. Upon further investigation, Keyes and Burcroff did find that 42 out of 51 respondents admitted that housing is another of their needs. However, if additional funds were available for credit, housing as a spending

26/ Davao Action Information Center, op.cit., p. 39.

27/ Ibid.

priority ranks far behind capital for small business, as shown in Table 23.

Table 23
1975 Housing Study Respondent's Priorities for
Spending if Credit is Available, by Amount

Priorities for Spending	P 100	P 500	P 1000	P 5000
Capital for small business	17	28	38	24
Education of children	4	2	1	0
Food	23	4	3	2
Housing/lot	1	6	1	12
Other	6	9	4	2
Total	51	49	47	40
No source of credit/afraid to borrow	-	2	4	11

SOURCE: Keyes, William and Roldan-Burcroff, Maria.
"Nonconventional Approaches to Housing Finance."
United Nations Center for Housing, Building and
Planning. (Submitted by Institute of Philippine
Culture, Quezon City, 9, 1975.)

2. Income Generation

In a study in Tondo, Hollnsteiner 28/ found that only 44 percent of both spouses were regularly employed. Sixteen percent were sporadically employed and 35 percent were not in the labor force at all. Four percent were openly unemployed. Of the respondents in Laya's survey 29/ which focused on another squatter community in Manila, about two out of three households heads were engaged in informal services with 42 percent of the families earning less than the minimum wage. BCS employment statistics also indicate that there were roughly 240 self-employed workers for every wage or salary earner in 1971.

28/ Hollnsteiner, Mary R., "Metamorphosis: From Tondo Squatter to Tondo Settler." Article published in NEDA Journal of Development. Volumes I and II, Nos. 2,3,4. 1974-75. pp. 249-260.

29/ Laya, Jaime C., et al. "An Economic Survey of a Manila Squatter Community: Ango-Leriza Area (1970)," in Papers and Proceedings of the Workshop on Manpower and Human Resources at the Continuing Education Center, Los Banos, Laguna. October 13-15, 1972.

Many of these jobs are created solely through the initiative of the self-employed and many such as jeepneys, sari-sari stores, peddling and repair businesses are directed at the low-income areas of the urban population. Houses are often more than a place to live. More than half of the Keyes and Roldan Burcroff sample generate some income by setting up small shops or businesses in the houses or renting out one or two rooms to lodgers. Several cases are documented where rooms have been added on to a house to lodge specific individuals at their request. As shown in Table 24, between 1972 and 1974 in Davao, there was no increase in the number of sari-sari stores suggesting that saturation (one store for every ten households) had been reached before 1972. (Light industry also remained the same, but the number of barber/beauty shops doubled.) Rental of rooms to boarders increased by 300 percent. In additional efforts to increase household income, more members of the family went to work.

Table 24
Small Business Ownership: 1972 and 1974

	Lower Class 1974	Middle Class 1974	Upper Class 1974	Total 1974
Sari-sari Store	35	35	21	91
Specialty Store	19	9	2	30
Buy and Sell	8	10	3	21
Tailor Shop	4	12	7	23
Barber/ beauty Shop	2	2	1	5
Rooms for Rent	17	30	49	96
Light Industry	12	1	1	14
Machine Shop	4	6	10	20
Other	10	26	14	50
1974 Total	111	131	108	350
1972 Total	54	90	79	223
% Increase	106%	46%	37%	57%

3. Social Networks

Contrary to popular beliefs, Holnsteiner found that only one-fifth of the squatters in the Magsaysay Village Tondo squatter settlement were born in a rural barrio. Over half were born in a provincial town and the rest in cities including Metropolitan Manila. Two-fifths had ten or more years of

urban experience before arriving in Manila and one-fifth were born in Manila. Most lived with friends or relatives upon arrival. Only one on seven lived alone or with strangers. Eighty percent of all households are made of single families. However, ties with the areas of origin do not remain strong when judged by the number and frequency of visits. Three of ten never returned for a visit and over two-thirds do so once a year or less. Hometown relatives seldom visit.

Community ties tend to be strong although this varies among areas. Most people living in low income neighborhoods are members of at least one neighborhood organization. More than half of the organization members said that their organization gives loans to members usually with another member as co-guarantor. The organizations have also lent assistance in securing both sites and materials. Community development in the Philippines seems to be a major component of successful low income housing settlements involving large self-help and/or cooperative components.

4. Location and Mobility Patterns

Transportation patterns illustrate the importance of the location of dwelling units being near to places of work. Forty-one percent of Hollnsteiner's sample walked to work, 41 percent took jeepneys, 14 percent relied on public transportation and four percent used private vehicles.

When squatters are evicted and resettled outside major urban areas, the breadwinner and sometimes the whole family will move back to the city either re-erecting a temporary dwelling or boarding with family or friends. Of the 6,000 families resettling in Sapang Palay, 60 percent left during the first six years. Most could not afford the P 1.00 fare to Manila.

The Davao survey showed an inverse relationship between income and residential mobility. Low income families in their search for better income opportunities change residence more frequently than do upper income households. As can be seen in Table 25, rental or purchase price was the primary reason for choosing present residence for 46.6 percent of the households surveyed and 51 percent of the low income families. Space and comfort were not very important reasons, especially among the middle income groups which tended to be employed in the formal sector. However, closeness to work was a strong second reason for these households to move and a close third for lower income households.

Table 25
 Reasons for Moving to Present Location by Economic Class
 (Percent)

	Lower		Middle		Upper		Total	
	N	%	N	%	N	%	N	%
Space	55	13.9	15	4.0	42	15.2	112	10.7
Comfort	42	10.6	33	8.8	29	10.5	104	9.9
Business Location	28	7.1	60	15.9	48	17.3	136	13.0
Rent/purchase	202	51.0	170	45.1	117	42.2	489	46.6
Prices								
Close to Work	52	13.1	78	*20.7	29	10.5	159	15.0
Close to School	6	1.5	5	1.3	10	3.6	21	2.0
Close to Market	1	.3	0	0.0	0	0.0	1	.1
Close to Relatives	10	2.5	16	4.2	2	.7	28	2.7
Totals	396	100.0	377	100.0	277	100.0	1050	100.0

Chapter III

INSTITUTIONS AND PROGRAMS

A. Institutions

1. Overview of Government Structure

Traditionally there have been a host of agencies with overlapping responsibilities in the Philippine shelter sector. Much of their efforts, however, have been concentrated in the Metro Manila area and as a result, shelter related issues in other urban areas have been ignored. For example, there are no agencies operating at the provincial or city levels comprehensively managing the shelter sector. Only isolated short-term projects have been attempted outside of Metro Manila many of which have met with only limited success.

In partial response to this problem, the Ministry of Human Settlements was created in mid-1978 to coordinate all aspects of human settlements development in the Philippines. It has identified 11 major sectors of human settlements on which it will focus its efforts. Table 26 lists these 11 sectors and the major ministries and agencies responsible for them. This chapter describes the functions of the major agencies responsible for program and policy formulation in the shelter, environment and social sectors, while Chapter IV discusses organizations involved in the water, power, transportation and finance sectors.

2. The Ministry of Human Settlements and Environment

The Ministry of Human Settlements (MHS) was created in 1978 by PD 1396 to act as an umbrella agency to coordinate all aspects of human settlements and environment policy, planning and programming. The MHS has identified 11 major sectors of human settlements: water, power, food (agriculture), clothing (cottage industries), economic base (livelihood), medical services, education culture and technology, ecological balance, sports and recreation, shelter (housing and loans use), and mobility (roads, transportation and communication). However of these 11, only two, ecological balance and shelter, are directly under the Ministry's jurisdiction. The others are supervised by other government bodies, with coordination from the MHS and its subsidiary agencies.

TABLE 26

Ministries and Agencies Involved in the Shelter Sector 1/

Ministry of Human Settlements					
Agencies under Ministry of Human Settlements					
National Housing Authority Home Mortgage Finance Corporation Home Financing Corporation National Housing Corporation			Technology Resource Center National Environmental Protection Council National Pollution Control Commission Human Settlements Commission		
<u>Ecological Balance</u> 2/	<u>Shelter (Ministry of Human Settlements)</u> 2/	<u>Water</u>	<u>Power</u>	<u>Food</u>	
Ministry of Natural Resources; Ministry of Agriculture; Ministry of Education & Culture; Ministry of Public Works, Transportation and Communication; Ministry of Local Government and Community Development; National Environment Protection Council; National Pollution Control Commission	National Housing Authority; National Home Mortgage Finance Corporation; National Housing Corporation; Home Financing Corporation	Local Water Utilities Administration; National Water Resources Council; Ministry of Local Government & Community Development; Ministry of Public Works	Ministry of Energy; National Power Corporation; National Electrification Administration	Ministry of Agriculture; Ministry of Natural Resources; Ministry of Industry; National Economic and Development Authority	
<u>Clothing</u>	<u>Economic Base</u>	<u>Medical Services</u>	<u>Education & Technology</u>	<u>Sports & Recreation</u>	<u>Mobility</u>
National Cottage Industry Development Authority; Ministry of Trade; Development Bank of the Philippines	Ministry of Labor; Ministry of Industry; Ministry of Trade; Ministry of Finance; National Economic & Development Authority; Development Bank of the Philippines; Central Bank	Ministry of Health; Nutrition Center of the Philippines; National Nutrition Council	Ministry of Education & Culture; Ministry of Public Information; Ministry of Public Works, Transportation and Communication; Ministry of Labor; Technology Resource Center	Ministry of Youth & Development; Ministry of Education & Culture; Ministry of Local Government and Community Development	Ministry of Public Highways; Ministry of Public Works, Transportation and Communication

NOTES: 1/ As listed by the Ministry of Human Settlements.
2/ Human Settlements Sectors under the jurisdiction of the Ministry of Human Settlements.

Eight agencies along with the newly created Human Settlements Development Corporation have been attached to the Ministry to execute its objectives. They are:

- National Housing Authority
- National Housing Corporation
- Home Financing Commission
- Home Mortgage Finance Corporation
- National Pollution Control Commission
- National Environmental Protection Council
- Technology Resource Center
- Human Settlements Regulatory Commission

The decree which established the Ministry also authorized an initial capital of ₱ 50 million with which to initiate its operations. Subsequent funding for the Ministry operations will come from the national government budget.

The Ministry is governed by a Minister, Deputy Minister, and by three functional secretaries in charge of finance and administration, operations such as training and special projects, and technical services initially aimed at developing comprehensive data bases of urban areas in the Philippines. Its current staffing, not including field representatives, is about 1,000, many of whom have been drawn from the Human Settlements Commission.

Even though the Ministry is newly created and its operating procedures are not firmly established, it intends to field 150 Human Settlement Officers (HSO) in October 1978 to 150 chartered cities. These officers will usually be drawn from existing city government staffs or other local agencies and would receive a monthly stipend of ₱ 400 to ₱ 500. The HSOs are intended to complement existing local government efforts and also to provide more intensive support for local planning in such areas as project identification, local resource identification and development, and coordination of related local and national agencies. The HSOs receive an initial two weeks' training from the Ministry and benefit from access to other Ministry programs.

The Ministry has initially budgeted ₱ 500,000 for each of its 11 program sectors as seed money for projects throughout the Philippines. As a first phase, the Ministry intends to identify projects in 12 regional capitals for funding. These projects could occur in any of the 11 sectors and need not be cost recoverable. If these original projects are successful, the Ministry intends to broaden the program to include other cities and municipalities.

The Human Settlements Regulatory Commission now functions as the Ministry's land use management arm. Its mandate is to implement land use development controls along national roads, to identify and facilitate changes from agricultural to urban land uses in specified areas, and to administer the ban on pollutive industries within 50 kilometers of Manila.

Human Settlements Development Corporation

PD 1396 which established the Ministry of Human Settlements, also created the Human Settlements Development Corporation to provide a corporate arm for the Ministry. The stated functions of the Corporation are the development of new communities which are economically viable and environmentally sound, and the renewal of urban communities through housing and other urban improvement projects. The Corporation has an authorized share capital of ₱ 500 million to be subscribed and paid for by the government of the Philippines.

The Corporation is not yet operational; however a Ministry task force is currently studying its development. Furthermore, its role in relation to existing agencies such as the National Housing Authority has not yet been clarified.

Initially two new Barong Lipunan sites (new town or urban renewal sites) have been identified for development by the Corporation -- 20,000 hectares in various municipalities of Rizal province and 160,000 hectares covered by two previous proclamations (numbers 1636 and 1637).

National Home Mortgage Finance Corporation

The recently established National Home Mortgage Finance Corporation, a parastatal of the Ministry of Human Settlements, was developed to provide additional housing finance. It aims at establishing a secondary mortgage market and at developing the financial resources of the private sector through savings mobilizing. As yet the Corporation is not operational, but has an authorized subscribed capital of about ₱ 200 million. Recently, a new executive director has been appointed who is drafting the Corporation's major policies and operating procedures.

3. The Ministry of Local Government and Community Development

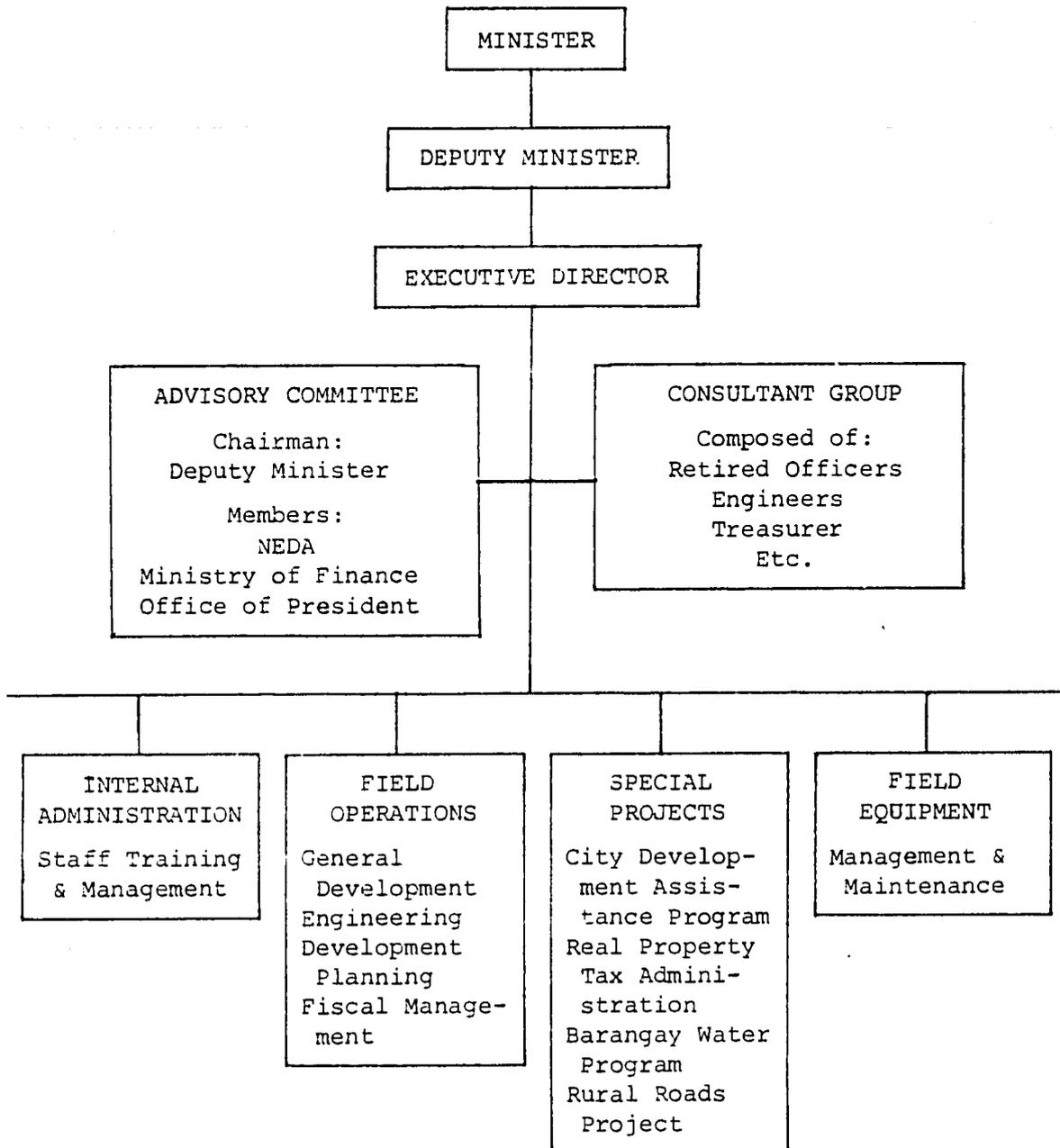
The Ministry of Local Government and Community Development (MLGCD) addresses urban shelter problems in secondary cities through four of its programs: (1) the City Development Assistance Program (CDAP) also called the Rural Service Center (RSC) program of USAID, (2) the Barangay Water Program, (3) the Real Property Tax Administration, and (4) the Rural Roads Program. While the focus of the latter program is mainly in rural areas, several of the municipalities benefiting under the other more urban oriented programs also participate.

Functionally the Ministry is under the jurisdiction of a Minister and Deputy Minister while an Executive Director is in charge of management of the Ministry's operations. At the next level in the Ministry's organization two advisory groups, the Advisory Committee and the Consultative Group, coordinate the Ministry's programs with other national priorities and technically review its operations. The management of the Ministry's actual programs and operations is the responsibility of four functional divisions: Internal Administration in charge of training and management of the staff; Field Operations in charge of general development, engineering, development planning and fiscal management; Special Projects comprised of the above four projects; and Field Equipment in charge of management and maintenance of equipment received under mainly USAID programs (see Figure 2).

The Ministry's major urban program, the CDAP/RSC program, has as its main objectives to upgrade the administrative capacity of local governments in chartered cities, to increase citizen participation in the planning and implementation of projects, and to assist and/or develop projects financed either locally or in conjunction with other agencies. To implement its stated objectives, CDAP has a staff of 16. Four of those staff members are professional while the remainder are generalist-administrative staff. CDAP expects to recruit an additional 22 staff members, one of which will be a community organizer. This is a joint project among the MLGCD, the Provincial Division of USAID and 15 chartered cities.

The project's focus is to assist the most disadvantaged households in the 15 cities while enabling them to play a greater role in the local decision-making process. In this case the most disadvantaged are defined as being six person households having annual incomes of ₱ 4,000 to ₱ 7,000. A further description of the CDAP/RSC program and its actual involvement in local government is provided in the reports on Angeles and Olongapo cities.

FIGURE 2
 Ministry of Local Government
 and Community Development
 Organization Chart



Real Property Tax Administration Project

The Real Property Tax Administration Project (RPTA) is a joint undertaking of the Ministry of Local Government and Community Development (MLGCD) and the Ministry of Finance (MOF) with supplemental funding and technical assistance from USAID. The project aims at increasing municipal revenues through more efficient administration of real property taxes. As such there are four components of the project: tax mapping, property appraisal/assessment, records management, and collections. Five hundred seventy-six municipalities and all chartered cities with the exception of Cebu City and Metro Manila will benefit from the project which has total funding of ₱ 41 million from the GOP and \$10 million from USAID. The project was initiated in 1977 and is to be completed by the end of 1980.

The actual implementation of the project is to be carried out by the offices of the city assessors and city treasurers with assistance from the MOF and MLGCD. The first phase of the project is tax mapping where, through aerial photos, geodetic maps and other physical surveys, real property is identified. Once tax maps have been prepared, assistance is given in real property appraisal according to market values and land use. Next RPTA provides assistance in tax records management. Finally, the operation strives to collect all real property taxes and penalties through total enforcement of all tax laws. This phase of RPTA consists of collecting, recording and accounting of real property tax revenues. In addition, no emphasis is given to the dissemination of public information pertaining to the methods and purposes of the RPTA. Although it is not the intent of the project, the public is informed of the possibility of property seizure if delinquent taxes are not paid.

4. Environmental Policy

The development of environmental policy is the responsibility of the recently established National Environmental Protection Council (NEPC), an advisory agency of the Ministry of Human Settlements and Environment. The council, which was created by PD 1121, combines the efforts of 13 other Philippine ministries or agencies involved in the development of environmental policy.

The NEPC has a professional staff of 110. Its functions are to rationalize all functions of government agencies involved in environmental protection, to formulate policies and issue guidelines for the establishment of environmental quality standards and environmental impact assessments, to recommend environmental legislative action, to undertake or sponsor environmental research, to monitor development projects sponsored by both government and private agencies and to conduct environmental education programs.

The Philippine Environmental Code, decreed June 6, 1977, established the major sectors of environmental responsibility of NEPC: air quality, water quality management, land use management, natural resource management, and waste management. However, as the NEPC does not have expertise in each of these areas, it relies on lead agencies or ministries which are directly concerned with the individual development of each of these sectors. These lead agencies with review from NEPC develop specific environmental standards and prepare environmental impact statements of projects they sponsor.

The newly established Ministry of Human Settlements through its parastatal, the National Housing Authority, is directly responsible for establishing shelter related environmental policies and standards. In addition, the Ministry of Local Government and Community Development in cooperation with the Ministry of Public Works and Transportation develops standards related to solid waste, provincial and municipal roads, and water supply systems. The National Pollution Control Commission is responsible for establishing air, water, land and noise pollution standards.

There have been numerous legislative acts regarding environmental policy; however, some of the most significant have been:

1. PD 1121 which created the National Environmental Protection Council.
2. PD 1151 and PD 1152 which created the Philippine Environmental Policy and established the Philippine Environmental Code.
3. Republic Act 3931 which created the National Water and Air Pollution Control Commission.
4. PD 984 which revised the above Act and established the National Pollution Control Commission as the body concerned with monitoring air, water, land and noise pollution.
5. Act 2153 which established water quality control and management.
6. Republic Act 6234 which created the Metropolitan Waterworks and Sewerage System and its subsequent revision under PD 425 which created the Metropolitan Waterworks and Sewerage Authority.

7. PD 198 which declared a national policy authorizing local operation and control of water systems. This decree also established the Local Water Utility Administration.

8. Republic Act 3844 which legislated agricultural land reform.

9. PD 757 which created the National Housing Authority dissolved existing housing agencies.

10. PD 933 which established the Human Settlements C. mission.

11. PD 1096 which adopted the Philippine national building code.

12. PD 1396 which established the Ministry of Human Settlements and Environment.

13. PD 1517 known as the Urban Land Reform Law which regulates urban land holdings and the use of urban land.

5. The National Housing Authority

In 1975, PD 757 created the National Housing Authority (NHA) to combine the activities of six other agencies involved in housing. By virtue of the PD, the People's Homesite and Housing Corporation, the Presidential Assistant on Housing and Resettlement Agency and the Tondo Foreshore Development Authority were dissolved and their functions absorbed by the authority. The National Housing Corporation, a government controlled corporation manufacturing housing components and undertaking housing construction and the Home Financing Commission, the government's housing mortgage insurance company, were also attached to the authority. The GSIS and SSS were instructed to cease undertaking mass or group housing, but the latter continues to grant individual housing loans to qualified members.

NHA's mandate includes planning, programming and executing all national housing programs in the Philippines. When it was established, its enabling decree provided for a paid-in capital base of ₱ 50 million and a subscribed capital of ₱ 450 million. NHA functions on an integrated approach to settlement which includes employment opportunities and the provision of social facilities. Where improvement of settlements is concerned, the authority is committed to a high level of participation from inhabitants in decisions on project formulation criteria.

Since over the past two years the NHA has simultaneously absorbed the housing organizations which preceeded it and expanded its housing and commercial development operations, its structure and coordination are not as rational as that of a new, more slowly growing organization. The present organizational structure of NHA (Figure 3) shows 14 office and department heads based on specialist functions. Each head reports separately to the General Manager (the position of the Assistant General Manager is still vacant). The present management level structure does not lead to coordination between the various departments nor does it support an integrated approach to the delivery of human settlements at the local levels. The organizational structure also seems to lack coordination among the various programs of the NHA (see Table 28).

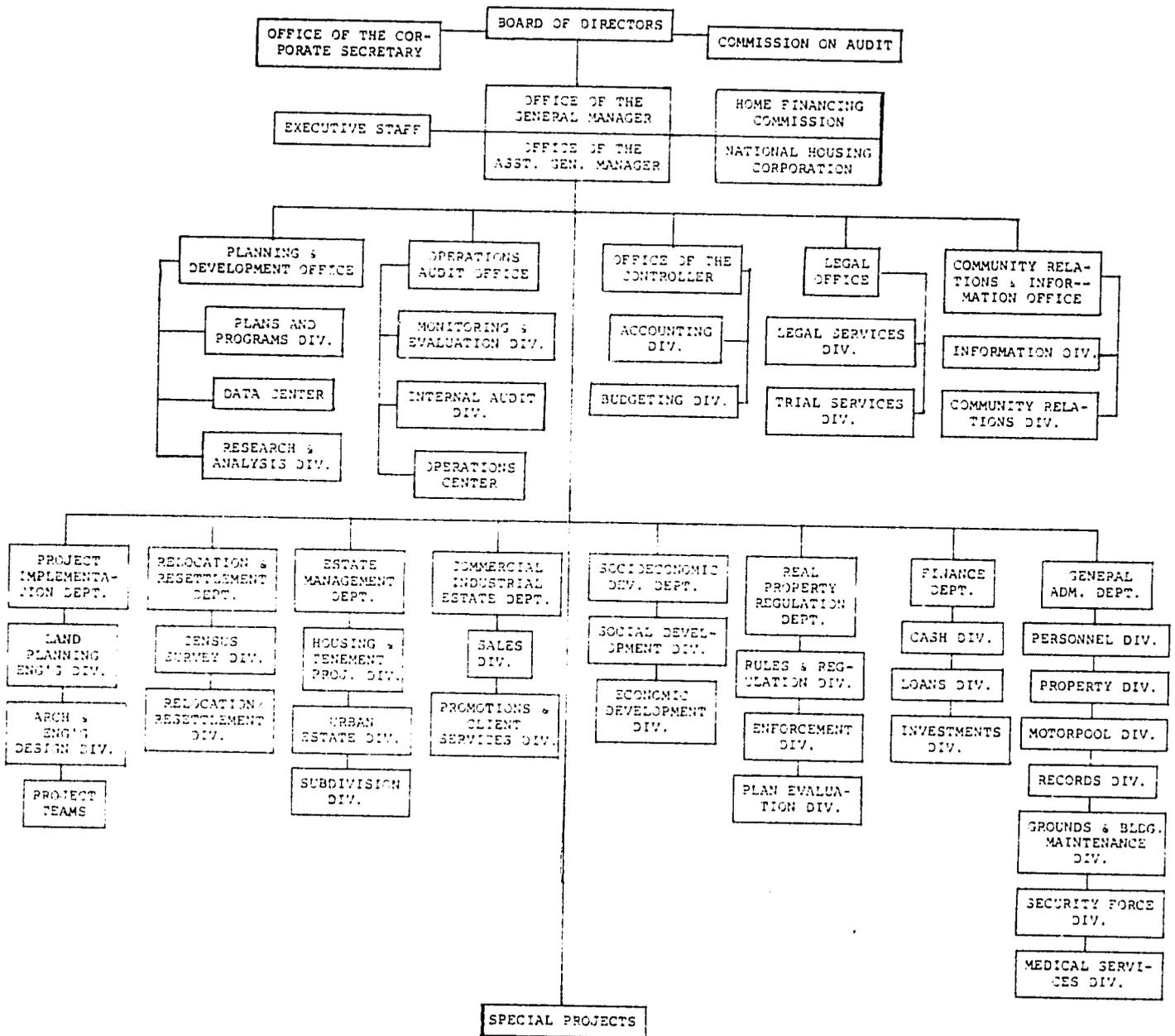
The improved delivery of housing to inhabitants in cities and municipalities suggests the need for regional NHA offices which would create a direct link to City Development Coordinators. New positions of responsibility for middle management would thereby be made available in the regions. This would leave more time for the national office to concentrate on long-range policy issues, while regional offices provide a communication link between community needs and national policy.

6. The Human Settlement Commission

Originally created by Executive Order in 1973, the Task Force on Human Settlements was superseded by the Human Settlement Commission (HSC) per PD 933 in 1976. ^{30/} In its first year of operation the institution was changed from an ad-hoc policy study body to a planning and regulatory institution. The HSC, while not a housing institution, prepares plans, settlement layouts and land use planning primarily for the Metro Manila Commission. Its plans define specific goals, strategies, and policies to implement NEDA socioeconomic plans.

^{30/} Although operational procedures are not completely established the Human Settlements Commission will become the regulatory arm of the Ministry of Human Settlements.

FIGURE 3
National Housing Authority
Organization Chart



As a regulatory function HSC prepared guidelines, rules and regulations regarding project plans for the implementation of environmental impact studies. ^{31/} HSC also clears applications for the conversion of agricultural lands into nonagricultural use. This becomes increasingly important as local governments select land for housing project sites.

The HSC employs 252 persons with an additional 452 persons employed by the Technology Resource Center as of June 1977. The Budget Commission released a total of ₱ 20.5 million of which ₱ 1.5 million was allotted to the National Coordinating Council in the latter half of fiscal year 1976-77.

7. The National Economic Development Authority

NEDA, as the socioeconomic planning authority, is concerned with regional development and project identification. Organized on a regional basis in 1975 with offices in all 12 regions, it is not a housing institution. However, the Regional Development Staff (RDS) at the national level prepares housing demand guidelines for regional plans in addition to financial assessments for projected public investment in housing for the national plan.

Since 1975, a concerted effort has been made to decentralize government agencies by creating Regional Development Councils (RDCs) for 12 designated regions, and Metro Manila. RDCs are composed of regional directors of national agencies, district directors, governors of provinces and mayors of cities and municipalities. Planning staffs for the RDC are provided by the NEDA regional office under direction of the NEDA Regional Executive Director.

Five year, ten year, and prospective regional plans have been prepared by the regional offices. These sectoral plans have been adopted by all RDCs and are reflected in the national plan. A few provinces have prepared development plans, as have the many cities and municipalities. Nearly all provinces, cities and municipalities have a development coordinator, but only those cities and municipalities with larger populations and higher revenue levels have development staffs.

^{31/} This function is now performed by the National Environmental Protection Council.

Regional housing need assessments and analysis for the regional plans are the responsibility of the social sector specialist in the NEDA regional office. However, assessment of local needs is limited in any regional plan since they require more disaggregated data than is available. With the present emphasis on implementation of regional plans, the need for housing analyses in cities and municipalities has become apparent. Planning for housing projects at the local level will place a heavier involvement on the MLGCD and should stimulate a strong linkage with NHA. Increased collaborations between these two agencies and the Ministry of Human Settlements should allow realistic housing and environment programs to be prepared at the national level and implemented at the local level.

B. Programs

1. Programs Up to 1977

Government housing construction for the low-income population is numerically negligible with only 13,500 units constructed from 1948 to 1972. Since 1972 the priority for government administered housing projects centered on low-income families in the Metro Manila area. Seven thousand core houses and 4,546 lots were provided to squatter families relocated to the Dasmarinas, Carmona, San Pedro and Sapang Palay resettlement sites. In 1976, an additional 10,000 families were relocated to government resettlement sites and several emergency relocation centers throughout the country. The resettlement program has suffered serious setbacks, however, as families have abandoned their resettlement sites and returned to the inner core of Metro Manila and other cities.

Urban upgrading and sites and services gained momentum in 1976 in the Tondo Foreshore and Dagat-Dagatan area with support from the World Bank. The Tondo Foreshore Project demonstrates NHA's concept of squatter upgrading and sites and services as a means of improving environmental conditions in a total community approach. An area of 180 hectares in the Tondo Foreshore comprising approximately 15,000 structures (about 160,000 people) is being upgraded by providing basic urban infrastructure, health, education and other welfare services, materials for house improvement and cottage industry loans. In addition, 3,000 new residential units are being provided under the project, including about 1,000 plots located within the Tondo Foreshore and about 2,000 plots built at Dagat-Dagatan. All new lots will be provided with

water, sewerage and electricity connections. Lot sizes vary, with the majority of lots approximately 48 m² in size. At a density of 90 units per ha., these lots reflect the high value of land and low-income levels of beneficiaries.

The design of the Tondo project demonstrates the World Bank's policy of full recovery of project costs. Because finance has been one of the critical constraints in the expansion of housing and related services, one of the prime objectives of the project has been the provision of urban services to low-income groups on a generally nonsubsidized basis. One of the methods used to achieve this objective is the employment of cross subsidies. For example, project charges to beneficiaries have been substantially offset by revenue anticipated from the sale and lease of 18.6 has. of commercial and industrial properties developed in the project area. In addition, project design is based on the use of self-help construction and high densities and small lot sizes.

According to the Bank, the principle adopted for full cost recovery is that those costs normally borne by private developers in a private housing scheme would be borne by the Tondo project unit and passed on to beneficiaries. Other expenses, such as major roads and schools, that normally would be incurred by government agencies in support of private housing schemes will also be borne by these agencies when supporting NHA projects.

Cost recovery in Tondo and Dagat-Dagatan is through 25-year leases, with an option to purchase after five years. Monthly lease payments are set to cover development costs at 12 percent interest over a 25-year period, after allowing for the cross subsidies.

The momentum in Metro Manila has also stimulated sites and services schemes and low-income housing construction in Dasmariñas, Naga City, Leyte and Lagaspi City as shown in Table 27. In Metro Manila, 526 family units were also completed in the Kapitbahayan pilot project in the Dagat-Dagatan area. The Kapitbahayan project, the first experimental pilot project in Dagat-Dagatan, has placed 3,700 persons in rental units of 30 square meters on 1.5 hectares. This pilot project was presented as the Philippine model at the United Nations Habitat Conference. The remainder of Dagat-Dagatan, a 367 hectare area of former fishponds three kilometers north of Tondo, is expected to provide 17,400 plots on a leasehold basis under a second World Bank urban development loan.

TABLE 27

Core and Housing Units: Partial Listing

Unit Type	Income Group	Location	No. Built/ Planned	Area m ²	Total Cost ₱ 1977 Price
Quadruplex	Indigent	Dasmaringas	2,100	4+9 roofed	2,480 each
				13 enclosed	3,200 each
	Economic	Naga	407	21	11,550
				30	11,500
Quadruplex	Economic	Leyte (Palo	225	30	13,125
Single	Economic	" "		33.6	17,640
detached	Indigent	Legazpi City	20	16.3	8,194
	Social	" "	102	16.4	12,781
	"	" "	113	20.0	14,718
	"	" "	121	24.5	16,743
	Economic	" "	146	34	22,179

* Includes superstructure, foundations, septic tank.

The private sector played a significant role in housing construction for open market and economic housing with the construction of 59,000 units between 1971 and 1977. These units were partially financed by government lending institutions such as the GSIS and the SSS. Another 19,400 units constructed by the private sector were backed by HFC mortgage insurance.

2. Present Programs

The NHA has initiated five housing programs which use the resources of the public, private and community sectors to expand housing services (see Table 28 for program summary, 1978-81):

1. The Pembansang Bagong Nayon (PBN) program, established by LOI 509 aims to provide a demonstration housing project of about ten hectares in each regional growth pole. The projects are developed and executed by local governments under NHA guidelines and review. Fifty percent of housing in any PBN project is to be reserved for the 'social' sector. The objective is to create a balanced community with a variety of income groups and include an array of social services and job opportunities.

TABLE 28
NHA Program Summary
(P Millions)

Program Component	1978		1979		1980		1981		Total		Average Unit Cost (P) <u>1/</u>
	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	
<u>New Housing Units</u>											
<u>Local Government</u>											
<u>Joint Venture</u>											
P.B.N.	230	12.3	1,176	31.0	1,377	39.9	601	17.4	3,384	100.6	30,000
Joint Venture	-	-	190	7.6	395	10.4	-	2.5	585	20.5	35,000
<u>Private Sector</u>											
<u>Joint Venture</u>											
Housing	440	27.8	2,275	80.4	3,579	157.7	3,668	148.3	9,962	414.2	41,500
Apartments	600	21.6	600	21.6	600	21.6	600	21.6	2,400	86.4	36,000
Dormitories	-	-	560	6.0	840	9.0	-	-	1,400	15.0	11,000
NHA Properties	905	44.3	4,396	94.1	4,348	164.6	2,580	59.7	12,229	362.7	30,000
Subtotals	2,175	106.0	9,197	240.7	11,139	403.2	7,449	249.5	29,960	999.4	33,000
<u>Sites and Services</u>											
NHA Properties	-	-	2,025	76.1	1,995	155.4	3,280	99.5	7,300	331.0	45,300
Dagat-Dagatan	1,500	55.0	6,893	78.0	4,957	77.0	4,050	64.0	17,400	274.0	15,750
Regional Cities	-	-	1,933	31.9	667	25.6	-	-	2,600	57.5	22,000
Subtotals	1,500	55.0	10,851	186.0	7,619	258.0	7,330	163.5	27,300	662.5	24,300
<u>Slum Upgrading</u>											
Tondo	5,000	161.0	9,300	61.0	200	20.0	-	-	14,500	242.0	16,700
NHA Projects	250	4.8	1,252	17.8	1,750	20.6	937	15.6	4,189	58.8	14,000
Regional Cities	537	5.5	3,037	32.5	4,506	41.7	314	6.8	8,394	86.5	10,000
Metro Manila	-	31.1	8,845	96.4	19,013	203.2	6,263	93.9	34,121	424.6	12,500
Subtotals	5,787	202.4	22,434	207.7	25,469	285.5	7,514	116.3	61,204	811.9	13,250
<u>Land Assembly</u>											
Program	(530 Ha.)	8.6	(165 Ha.)	36.4	(230 Ha.)	23.5	(220 Ha.)	2.2	(1,185 Ha.)	70.7	
Subtotals		8.6		36.4		23.5		2.2		70.7	
<u>Economic Opportunities</u>											
Program		32.0		23.2		24.4		5.0		84.6	
Subtotals		32.0		23.2		24.4		5.0		84.6	
Totals	9,462	404.0	42,482	694.0	44,227	994.6	22,293	536.5	118,464	2,629.1	22,200
<u>New Projects</u>											
(To be identified)	-	-	-	-	-	-	50,083	851.9	50,083	851.9	17,000
<u>Operations</u>											
	-	51.8	-	33.4	-	40.5	-	50.0	-	175.7	
Grand Totals	9,462	455.8	42,482	727.4	44,227	1035.1	72,376	1437.4	168,547	3,656.7	21,700

1/ Calculated by PADCO.

2. The local government joint venture scheme is intended to provide new housing units but with an emphasis on income groups at the lower end of the 'social' sector. NHA would lend funds to local governments at 0 to 3 percent for 25 years for 'indigent' groups in the scheme who would receive a leasehold, and at higher rates for 'social' groups.

3. The private joint venture scheme has been recently initiated. The sponsor/developer provides land, design and construction and the NHA provides 100 percent long-term finance to financial intermediaries at 7 percent for 25 years for 'economic' housing, 3 percent for 25 years for 'social' housing. The financial intermediary then on-lends these funds with a 3 percent spread to project occupants and bears the credit risk. Housing for 'economic' groups would be owned freehold by the beneficiaries and those to 'social' groups would be leased.

4. Sites and services projects have been developed by NHA on relocation sites for squatters. They are still intended to be used as such, but NHA is expanding the concept to provide new sites for low-income, nonsquatter families, e.g. Dagat-Dagatan in Metro Manila.

5. The Slum Improvement and Resettlement (SIR) Program of which the Zonal Improvement Program (ZIP) is the Metro Manila component, has been developed since June 1977 following LOIs 555 and 557. (See Table 29 for a full list of Government Decrees and Letters of Instruction on housing.) The program's objective is to upgrade the living conditions of slum and squatter dwellers with minimum relocation, and in consultation and agreement with the communities affected. Physical and social infrastructure is provided, leasehold tenure offered and training and loans for small-scale business and cottage industries also form part of the package.

6. A number of miscellaneous housing projects do not fall under the above categories. Some provide units for rental, others are three to five story walk-up apartments. A number of the projects have been inherited from the earlier housing agencies. In general, they are addressed to similar income groups as the Pembansang Bagong Nayon. Most are located in Metro Manila.

Feasibility studies for the implementation of the SIR Program in the region have been carried out in Cagayan de Oro, Cebu and Davao and projects will be funded under the Second IBRD Urban Development Loan. It is expected that the projects will provide core housing and infrastructure facilities for approximately the following number of lots in each city:

TABLE 29
 Government Regulations Through
 Presidential Decree and Letter of Instruction
 (related to housing)

1973	Executive Order 419 PD 297	created Task Force on Human Settlements; provided that the Development Academy of the Philippines become study group for TFHS.
July 1975	PD 757	created NHA and dissolved PHHC, PAHRA, TFDA as functions were absorbed by NHA. NHC and HFC attached to NHA. Group housing by GSIS and SSS suspended.
May 1976	PD 933	created Human Settlement Commission.
July 1976	PD 953	required subdivision owners to set aside 30 percent of subdivision land area as open space for parks and playgrounds (previous requirement only 6 percent).
May 1976	PD 933	created Human Settlement Commission; required subdivision owners to set aside 30 percent of subdivision land area as open space for parks and playgrounds (previous requirement only 6 percent).
1976	PD 957	regulated sale of subdivision lots and condominiums; providing penalties for violations.
Feb. 1977	LOI 509	created Pambansang Bogong Nayon Project for local governments in regional growth centers set by NEDA and HSC.
Feb. 1977	LOI 511	created NCC for Town Planning, Housing and Zoning.
1977	LOI 555	created Zonal Improvement Program (ZIP) for Metro Manila.
June 1977	LOI 557	adoption of slum improvement (SIR) as a national housing policy.

	<u>Total</u>	<u>Upgrading</u>	<u>Site/Service</u>
Cagayan de Oro	5,830	2,680	3,150
Cebu	5,430	2,280	3,150
Davao	<u>3,660</u>	<u>1,430</u>	<u>2,230</u>
	14,920	6,390	8,530

NHA's present program attempts to reach wider segments of the Philippine population than has previously been attempted by other institutions. Table 30 shows the income grouping used by NHA to target its housing. The four percentile groups under indigent, social, economic and open market are kept constant and the income distribution for each project is categorized under these headings. However, affordability is not linked directly to standards and costs. Most programs are subsidized, the beneficiaries paying only 50 to 70 percent of total costs, since major project elements, such as infrastructure, schools and health centers are provided through the budgets of the relevant national agencies. The degree of subsidy depends on the balance of cost remaining after the beneficiaries have paid according to their affordability and after any applicable cross subsidies.

TABLE 30
NHA Target Income Groups

	Monthly House- hold Income Range ₱/month*	Percentile Group	Percent of Income for Housing
'Indigent' Group	Below 250	0-35	15-20
'Social' Income Group			
Lower Social	250-333	36-79	15-20
Middle Social	333-500		
Upper Social	500-666		
'Economic' Income Group			
Lower economic	666-833	80-96	20
Middle economic	833-1,250		
'Open market' Group	1,250+	97-100	25

* Varies by location

SOURCE: NHA

Program Evaluation

The NHA program shown in Table 28 is a recent revision of the official program which was based on the 1978-82 National Housing Plan. The former program was quite ambitious in that it programmed 280,500 units over the 1978-82 period with 42,000 units in 1978 and 51,000 units in 1979, compared to only 11,500 completions (including emergency relocations) in 1976. In addition about 22,000 sites and services were "undefined" in that they were general allocations without defined locations. Significantly, the local government joint venture program was only programmed to start in 1981 and totalled just 2 percent of all units in the program.

With the exception of the latter, the present program shown in Table 28 is far more realistic in that it seems to be based on actual project plans. In this sense it is perhaps a minimum alternative since planned actual units decrease in 1981 and are supplemented by about 50,000 units in projects yet to be identified. Including these units, the total programmed through 1981 is 168,547.

Average unit costs have been calculated and inserted in Table 28. These costs must include NHA planning and overhead since they are quite high, especially for the sites and services and slum upgrading programs. ^{32/} Average costs of sites and services are about ₦ 24,000 compared to a target of ₦ 10,000 in the old program. While unit costs for slum upgrading also seem high, the average (₦ 13,250) for the program is below the previous program's target of ₦ 15,000 to ₦ 17,000.

Significantly, local government joint ventures (excluding the PBN program) are also very small in this program, only 0.3 percent of the total. This is mainly due to the lack of identified projects in the provincial cities and the fact that NHA operations are still quite centralized. The SSA team found there is substantial shelter sector planning activity on the local level by the City Planning and Development Staffs. However, they could use far more guidance and support from NHA representatives in program and project formulation.

^{32/} There might be a mistake in the 1980 figures for NHA Properties (under Sites and Services, average unit cost of ₦ 77,900) which leads to a very high average cost for the sub-program.

3. Future Programs

The National Development Plan places the major emphasis in the national housing program on squatter upgrading and sites and services (see Table 31). A comparison of the planned figures for NHA and NHA's own program, however, reveals the ambition of the Plan. Total units planned for NHA from 1978-82 are 302,500 versus 168,547 in NHA's program from 1978-81. Thus, the Plan figures should be taken as guidelines only and not as concrete goals which must be attained at all costs. As the NHA becomes more familiar with sites and services and squatter upgrading project preparation, the number of units completed should increase substantially in the latter years of the Plan. The decentralization of MHS and NHA by providing representatives in supporting roles to local government will also increase the local government joint venture program.

Although the Plan allocates squatter upgrading and sites and services between urban and rural locations, NHA has no specific program for rural upgrading as yet. The land assembly and corollary programs are quite commendable, however. The NHA's land assembly program from 1978-81 is already 77 percent of the total called for in the Plan. Early land assembly of suitable sites not only assures later quantitative goals, but also results in substantial savings as land values appreciate often due to NHA's own investment.

Significantly, the Plan also recognizes that viable housing programs are not composed solely of housing units. The programs for employment generation and the extension of socioeconomic services are essential to the creation not only of self-sufficient communities but also of self-amortizing programs. The financial requirements for the Plan are to be generated from Budgetary appropriations, issuance of bonds, funds from government financial institutions, and international loans.

TABLE 31
GOVERNMENT HOUSING PROGRAMS, 1973-87

Program	Description	No. of Units		Investment Require- ment (In millions of US\$)		Lead Agency
		1975-87	1973-82	1978-87	1978-82	
I. Direct Housing	Housing units will be constructed in various parts of the country for low and middle income households. Core/shell houses built on serviced lots of resettlement areas will be provided.	561,585 ¹	254,527 ¹	22,391	8,254	
A. Construction of new Units						
1. Government-Administered	New houses of mixed types such as single detached units, cluster houses, and medium-rise apartments will be built. Eighty per cent of investment will be allocated for social housing and 20 per cent for economic housing. Joint ventures with the private sector and local governments will be undertaken in order to serve the target beneficiaries in different urban areas of the country.	201,036	72,137	6,276	1,603	NHA
2. Government-financed	Individual housing loans will be extended and mass housing projects will be financed by government financial institutions.	104,043	76,373	3,059	3,848	CSIS, SSS, DBP
3. Others						
a. Rural housing	Housing assistance will be provided for settler families within rural farm resettlements located mainly in Marikina.	66,330	41,330	514	207	DAR
b. Military housing	Houses will be provided for military personnel.	81,784	27,294	6,543	2,183	AFP
D. Sites and Services Development	Families relocated from urban areas and urban centers for public infrastructure developments will be the beneficiaries. Low and lower middle income families in need of housing assistance will also be served. If settlement sites will be provided with core shell houses complemented by physical infrastructures, community facilities and other residential services.	86,312	27,453	1,459	443	NHA
II. Upgrading of Sites and Services	The major emphasis of the program is to improve the living conditions of the urban poor by providing them with limited resources.	572,271 ¹	192,913 ¹	14,339	3,371	
A. Urban Upgrading	Reduce the level of housing urban communities through provision of infrastructure and improving physical facilities complemented by a socioeconomic component which will provide community services and employment opportunities.	473,789	144,245	12,785	2,776	NHA
B. Rural Upgrading	Community projects will be established in selected areas to provide self-help housing and environmental services for the rural people.	97,482	48,713	1,554	595	NHA
III. Land Assembly	Land suitable for housing will be acquired and used for projects involving the construction of new units and sites and services development.	4,373 hectares	1,514 hectares	2,194	570	NHA
IV. Community Programs	Consistent programs that support the integrated development of housing projects as envisioned by the human settlements approach.			2,709 ²	603 ²	
A. Development of Enterprise Cooperatives	Small and medium-scale enterprises will be developed in commercial/industrial estates to generate employment for low income families. This ensures the long-term self-sufficiency of housing settlements through job opportunities, services development and upgrading.			1,351	335	NHA
B. Socioeconomic Program	A package of projects designed to help residents enjoy housing benefits and manage their housing projects. It includes such activities as housing estate management, technical skills training and job placement, cooperative management seminars, family planning and nutrition training, and youth development through sport activities.			237	56	NHA in cooperation with NMEC, CSIS, POPCOM, DSH, DUSCO, DCC, NARCIA, UP-SSI
C. Relief and Rehabilitation	Families affected by emergency situations and in need of housing assistance will be served.			271	67	NHA in cooperation with DSSD, AFP
V. Technical Assistance and Research on Housing and Environment	The program involves researches directed towards the development of indigenous building materials and construction techniques, standard housing designs and components, and technical assistance for the improvement of housing and environment.			3	3 ³	NHA, NSDB
VI. Home Mortgage Insurance Program	The program aims to promote home ownership through the extension of mortgage insurance financing on dwelling units to be financed by the private banking system and constructed by NHA.			1,050	658	HFC

1. These dwelling unit figures are assumed to be equal to the number of households to be served.
2. These figures include the current operating and technical assistance expenses of NHA.
3. This includes a government counterpart fund for a two-year research project on marginal settlements improvement.
Sources: NHA, CSIS, SSS, DCP, HFC, DAR, AFP, NSDB.

Chapter IV

SHELTER DELIVERY SYSTEMS AND CONSTRAINTS

A. Land

One of the main constraints affecting the availability of housing is the private urban land market which owns most urban land in the Philippines. This market is dominated by a real estate brokers' association which imposes a standard 5 percent fee on all land transactions. The market is furthermore characterized by a rather inelastic supply which has been subject to heavy speculation.

The former Joint Legislative Executive Tax Commission reported that urban land values in the Philippines have appreciated on an average of 12 to 15 times between 1940 and 1970. In Manila, land values have increased by as much as 27 times while surrounding metropolitan areas have seen increases as great as 50 times. These extremely high land costs have resulted from the concentration of urban land in relatively few hands and the withdrawal of large portions of urban land from the market. Land speculation can increase the cost of developed land five or six times over the original cost of the raw land prices.

As a result of high urban land prices, housing developments aimed at benefiting low-income households have had to locate at great distances from city centers. For example in early 1969, one had to travel 31 kilometers from the center of Manila and 6 kilometers from the main highway to find land at 25 pesos per square meter. ^{33/} In the case of several government resettlement projects, notably Aspang Palay, Dasmarias, Carmona and others, these distances were so far from the city center that the new residents were cut off from employment opportunities and lacked transportation to other areas. Furthermore, the distance from city centers made extension of municipal services such as water supplies costly. As a result several of the projects lack any infrastructural provision. ^{34/}

^{33/} Casanova, Ramon N. Evolving a Philippine Land Policy for Low-Cost Housing. NEDA Journal, p. 222.

^{34/} Abesamis, Felix D. Squatter-Slum clearance and resettlement programs in the Philippines. NEDA Journal of Development Vol. I and II, National Economic Development Authority, Manila, 1974-1975, pp. 304-305.

To a large extent these land constraints are artificial. A 1973 land use study of Metropolitan Manila found that 64 percent of the land within its boundaries was undeveloped open land. ^{35/} While not all of this land may be developable, it represents a major untapped land resource.

The primary reasons for this abnormal land situation are: (1) the skewed concentration of land ownership stemming from feudal Spanish colonial times, (2) the low tax on land, (3) high land prices due to speculation and selective withholding of land to create urban land scarcities and (4) the reluctance of government to use executive powers to control land prices. ^{36/}

In the Philippines, private lands are those registered in favor of persons and public or private corporations under the Land Registration Act on the basis of any of the following:

1. Land patent issued under the Public Land Act;
2. Royal grant;
3. Special grant;
4. Adjustment of title;
5. Title by purchase;
6. Open, continuous, exclusive and notorious possession under a bona fide claim of ownership for at least 30 years.

Government lands include public lands and other lands the government has reserved or devoted to public use or subjected to private right. Although land reform acts have been implemented, large tracts of urban land are still held by a small number of holders who control their development.

Public land policy as it has evolved has attempted to rectify some of the inequities of the land tenure system. Unfortunately much of the policy has had negative impact on housing development. Much of the land reserved for public use is difficult to develop as it is reclaimed land, or land fronting on large bodies of water. Further, the necessity of selling public land to the highest bidder restricts land sales to upper-income brackets and the repurchase provision of public lands acquired through homestead or free patent

^{35/} Human Settlements: Emerging Concepts and Issues, Situation Report 1, Dec., 1973, p. 51.

^{36/} Casanova, Ramon N. Evolving a Philippine Land Policy for Low-Cost Housing. NEDA Journal, pp. 349-366.

restricts development of these lands. Finally, the Bureau of Lands, the implementing agency of the Public Lands Act, lacks financing to set up agricultural colonies aimed at diversifying urban development.

Taxation policies have been identified as one of the reasons for current inequities in urban land development. The present assessments on real property are low and many municipalities lack efficient assessment staff to implement taxation policies. They also have no cadastral maps for identification of property ownership. The present maximum real property tax rate of 3 percent is applied uniformly regardless of the value or use of the property. This encourages capital intensive uses of the land as well as inefficient land use programming. 37/

The Philippines has had a long history of land reform in agricultural areas. The most recent legislation was the establishment of a Land Bank under the jurisdiction of the Department of Agrarian Reform in 1963. Subsequent to that act, Presidential Decree 2 declared all of the country in a land reform area and set land values of agricultural land in terms of the land's productivity. 38/

Presidential Decree 1517 signed in mid-1978 is aimed at reforming urban land ownership practices which have resulted in large urban land holdings and speculation. The law creates a Land Reform Coordinating Council chaired by the Minister of Human Settlements and composed of representatives from seven other government agencies to develop guidelines for urban land use and management.

While the decree has not been published, it authorizes the President to proclaim parcels of land as 'urban land reform areas.' Such areas would be subject to development and zoning regulations established by the Ministry of Human Settlements. Once declared an urban land reform area, a parcel of land would be subject to expropriation if existing landowners refuse to develop it in compliance with the Ministry's guidelines. Tenants whose tenancy has exceeded ten years would also be protected from eviction from urban land reform areas and would be encouraged to purchase their lots at reasonable prices and terms.

37/ Sharing in Development, pp. 263-276.

38/ Sharing in Development, pp. 473-476.

As the decree authorizes no new capital for the Ministry to implement development of urban land reform areas, much of the development capital is expected to originate from the private sector or existing financial institutions. As such the decree aims at encouraging existing landowners to develop their land holdings while attempting to limit the size of those holdings.

B. Public Utilities

Public infrastructural services are sporadically supplied to different urban areas in the Philippines. Furthermore, there is no set pattern for administering these services. Some services are the responsibility of the central government while others are provided by local jurisdictions and some are shared among various levels of government.

Generally, the range of services provided by a chartered city depends on its income. Manila City for instance is relatively autonomous because of its high income and can provide and administer services without national aid. Poorer jurisdictions tend to be less adequately served. This situation promotes the lack of development in those regions and results in migration to richer regions.

The Ministry of Public Works, Transportation and Communications, the Ministry of Highways and the Ministry of Energy have the primary responsibilities for policy and program formulation for public infrastructure. These ministries also monitor the operations of private organizations providing infrastructural services. The Metropolitan Water and Sewerage System and the Local Water Utilities Administration operate and develop potable water supply systems in urban areas larger than 20,000 persons while the National Water Resources Council and the Ministry of Local Government and Community Development have similar programs for smaller urban and rural areas. In charter cities other than Manila and Cebu City, city governments, primarily through their engineering, public health and utilities department, provide a wide range of municipal infrastructural services.

1. Water Supply

The provision of water supplies is the responsibility of the Metropolitan Waterworks and Sewerage System (MWSS) in the Metropolitan Manila area. In the provinces, the Local Water Utilities Administration (LWUA) aids in guiding water supply development in urban areas with populations of 30,000 or more. However, many urban areas have municipal waterworks under the jurisdiction of the city governments. In areas with urban populations less than that and rural areas, the development of water supply facilities is under the Barangay Water Project of the Department of Local Government and Community Development.

The water supply system is inadequate throughout the Philippines and poor environment sanitation has been cited as the major contributor to the high incidence of communicable diseases. Potable water is currently available to less than 50 percent of the population. In urban areas slightly over 55 percent of the population have access to municipal water distribution systems with roughly half located in the Metropolitan Manila area. More than 1,000 barrios, 800 municipalities and six cities are currently estimated to be without water supply systems.

Although the growth in the urban population has increased the demand for safe water supplies, distribution systems have not expanded. Their carrying capacity has decreased over the years and leakage has increased due to fractures resulting from settling and increased traffic loading. Many of the municipal systems have suffered from the lack of systematic maintenance since their operating costs have been heavily subsidized. As a result, the majority of those now served by the distribution systems receive inadequate supplies as pressures are low. In many areas the existence of negative pressures causes back siphonage and contamination of potable water supplies.

Although the proportion of dwelling units with adequate water supply increased from 43 percent in 1956 to 51 percent in 1970, the absolute number of dwelling units without adequate water supplies increased by almost 40 percent. In addition, lower-income urban families frequently have less access to water and pay higher proportions of their incomes for it than do upper-income households.

TABLE 32
Water Demand Supply, 1977, 1978-82, and 1987

Metro Manila Area	1977	1978	1979	1980	1981	1982	Increase from 1977	1987	Increase from 1982
Per capita demand (lcd)	235	244	253	262	271	280	45	325	54
Total water demand (ML/day)	1,363	1,488	1,619	1,755	1,897	2,016	653	2,633	617
Total water supply (ML/day)	1,081	1,196	1,316	1,441	1,572	1,680	599	2,308	628
% of population served	80	81	81	82	82	83	3	88	5
<u>Other Urban Areas</u>									
Per capita demand (lcd)	115	118	121	124	128	131	16	144	13
Total water demand (ML/day)	990	1,156	1,331	1,513	1,715	1,915	925	2,120	205
Total water supply (ML/day)	483	602	738	880	1,062	1,245	762	1,800	555
% of population served	49	52	55	58	62	65	16	85	20
<u>Rural Areas</u>									
Per capita demand (lcd)	25	26	26	27	28	28	3	32	4
Total water demand (ML/day)	735	771	795	821	845	872	137	1,150	278
Total water supply (ML/day)	243	285	334	378	431	478	235	920	442
% of population served	33	37	42	46	51	55	22	80	25
<u>Philippines</u>									
Total water demand (ML/day)	3,088	3,415	3,745	4,089	4,457	4,803	1,715	5,903	1,100
Total water supply (ML/day)	1,807	2,083	2,388	2,700	3,065	3,403	1,596	5,028	1,625
% of population served	42	46	50	54	58	62	20	83	21

Source: Five Year Philippine Development Plan, 1978-82, p. 316.

Table 32 shows total potable water demand and supply conditions for Metro Manila, other urban and rural areas and the Philippines as a whole. In 1977, only about 49 percent of the urban population living outside of Metropolitan Manila received municipal water supplies, while only 42 percent of the entire Philippine population were served. The remainder relied on smaller often unsafe water sources such as shallow wells or nearby natural watercourses.

To rectify these water supply deficiencies, the government has embarked on a large program aimed at increasing water supplies in the Metropolitan Manila area and approximately 300 communities having populations greater than 20,000 and representing 50 percent of the total Philippine population outside Metropolitan Manila. The responsibility for developing the bulk of these smaller urban water supply systems rests with the Local Water Utilities Administration. Primarily through LWUA's efforts, the proportion of the urban population served with potable water supplies is projected to increase from 49 percent in 1977 to 85 percent by 1985. The following section is a brief description of LWUA's functions and operations.

The Local Water Utility Administration was formally established on September 18, 1973, as a specialized lending institution for the promotion, development and financing of local water utilities. Its enabling legislation authorized share capital of ₱ 2,500 million to be subscribed by the National Government, private investors and other government financial institutions.

Presidential Decree 198, which authorized the establishment of LWUA, also authorized the establishment of autonomous local water districts in urban areas having populations in excess of 20,000 to operate and manage local water and sewerage systems. As quasi-public corporations, local water districts are exempt from all forms of taxation and are not under the jurisdiction of "any political subdivision." ^{39/} If the local water district takes a loan from LWUA, it is subject to administrative management by LWUA during the duration of the loan to ensure proper management of the district. By mid-1978, 350 water districts had been formed.

^{39/} Presidential Decree 198, September 21, 1972.

LWUA assists municipalities in forming water districts and provides them with financial and technical assistance in operating water distribution systems. It provides local water districts with either short-term loans of five to 15 years at 9 percent to initiate immediate improvement of existing waterworks and long-term loans up to 30 years at 9 percent. The latter aims at fully evaluating the technical and financial viability of local water districts and provides them with financial managerial techniques for economic operation of their waterworks systems.

By 1976, LWUA had a staff of 250 employees of which 147 were in professional or administrative positions. It had a paid up capital of ₱ 137 million representing 27 percent of its funds and foreign loans from USAID, IBRD and other international agencies of \$44.4 million, and had granted loans to 23 water districts totalling ₱ 511 million. 40/

2. Surface Water Drainage and Sewerage

The combined effects of the lack of surface water drainage and poor sanitation plague most urban areas in the Philippines. These conditions create severe environmental hazards during heavy rains and increase the risk of contamination of potable water supplies. While municipal and provincial governments generally have health departments in charge of monitoring environmental sanitation conditions, these departments are usually understaffed and lack adequate budgets to actively monitor sewerage and surface water drainage systems.

Frequently, the construction standards of surface water drainage systems are so high that they cannot be provided uniformly throughout urban areas. As a result many new, lower-income areas lack adequate drainage and become catchment areas for runoff from other areas threatening potable water supplies from shallow wells and increasing the incidence of water borne diseases.

The Five Year Development Plan estimates that only 42 percent of the Philippine population had access to some form of sewerage system in 1977. Even in Metro Manila, conditions were only slightly better as 44 percent had access to sewerage systems. The bulk of these systems were private however, as only 18 percent of Metro Manila's population and 5 percent of other urban areas were connected to public sewerage systems.

40/ Annual Report. Local Water Utilities Administration. Republic of the Philippines. 1976.

As shown in Table 33, conditions are projected to improve by 1987. The Five Year Development Plan outlines a program of increasing the coverage of public sewerage systems from the present 5 percent of the population to 37 percent by 1987 (see Table 33).

TABLE 33
Sewerage Facilities in the Philippines

	1977 %	1982 %	1987 %
Percent of population with sewerage facilities			
Metro Manila	44	51	62
Rural	41	43	55
Other Urban	42	48	60
Total	42	46	57
Percent of population served by public sewerage systems			
Metro Manila	18	18	35
Rural	2	2	32
Other Urban	5	5	50
Total	6	5	37

Source: Five Year Development Plan, 1978-1982.

3. Power Supply

The Ministry of Energy is responsible for developing national energy policies and programs. The power sector is composed of over 800 public and private utilities most of which purchase their power supplies from the National Power Corporation (NPC), a parastatal of the ministry and the largest single power producing utility. The NPC currently operates 14 hydroelectric plants, eight thermo plants and seven diesel plants with a total installed capacity of 2,703 megawatts accounting for 76 percent of the country's total capacity. The National Electrification Administration (NEA) is in charge of the distribution and cooperative management of electrical power supplies. Small private and municipal utilities primarily provide power in isolated areas not covered by the national power distribution grid. The majority of these smaller systems tend to be less efficient in their operations than the larger national systems.

Presently about 35 percent of all Philippine households are served by electric power supplies. Within that service population, there are large disparities in the quality and costs of service provided. Almost 63 percent of all power generated in 1977 was consumed in Luzon, while only 16 percent was supplied to consumers in the Visayas.

The National Electrification Program aims at increasing the proportion of the population served by electrical power. It projects that 60 percent of all Philippine households will have access to electricity by 1982 and that by 1987 85 percent of all Philippine households will have power supplies (see Table 34).

TABLE 34
National Electrification Program
1977, 1982 and 1987

Year	Number of Houses Served with Electric Power	Percent of Households Served
1977	2.6 million	35%
1982	5.2 million	60%
1987	8.5 million	85%

Source: Five Year Development Plan, 1978-1982, p. 340.

4. Urban Transport Services

The major urban transportation problems are concentrated in Metropolitan Manila. Other cities in the Philippines also have transport problems, but not of the magnitude confronted by Metropolitan Manila. Their major urban transport task is to assure a development pattern which will avoid problems created by overconcentration.

Manila's transportation problems result from excessive crowding of population and activity into a small land area and from poor land use planning. The situation has further been exacerbated by the large growth in the number of passenger vehicles in Metropolitan Manila. In 1975, the nation as a whole had one motor vehicle for every 60 inhabitants, while Manila had one for every 12 inhabitants. Furthermore, although Manila has about 10 percent of the total population, over 40 percent of all registered vehicles are located in Manila.

Current transport systems are severely overtaxed and traffic congestion on major thoroughfares is common. Further, the system is constrained by the lack of public finance and has traditionally relied on private transport systems. In recent years the growth in registration of private transport vehicles has not kept pace with the growth in private cars. As a result many areas experience shortages of transportation facilities in addition to inadequate road networks.

Given the difficulty, if not impossibility, of obtaining sufficient funds to finance the needed transport infrastructure in Manila as well as secondary cities, there is a need to combine transport with other urban programs. Plans are needed for spatial arrangements designed to minimize transport requirements and to provide integral transport components in new industrial-population centers outside of concentrated areas. The location, design and redesign of streets and other transport infrastructure can result in new uses for land and create new sites for housing, shopping and industry. The Philippines must formulate an effective spatial strategy for Manila as well as secondary cities where more possibilities exist to influence the demand for transport.

C. Construction Sector

The construction sector in the Philippines is relatively smaller than in other Asian developing countries. Its contribution to GNP ranged only about 2 to 3 percent between 1960 and 1972. Employment in the sector has also been small, averaging about 3 percent of total employment. ^{41/} Since 1961 the sector's share of gross fixed capital formation has dropped from 48 percent to 36 percent in 1972, indicating a drop in construction output. However, the residential portion of construction has remained fairly constant at 38 percent.

The Five Year Philippine Development Plan projects an annual construction sector growth rate of 12.4 percent due to the heavy projected investments in infrastructure, housing, and commercial and industrial development. Government construction, primarily infrastructure, will constitute 39.9 percent of total construction by 1982 and 39.2 percent by 1987.

^{41/} Employment in informal residential construction activities is omitted as is output resulting from that category of construction.

Much of the sector's activities are geographically concentrated in the Metropolitan Manila - Central Luzon area. Almost 50 percent of all infrastructure investment occurred in those two areas, as did a large portion of total residential construction.

The technology in the sector has been biased toward capital and import intensity. Investment in capital equipment increased at an average annual rate of 25 percent during 1960-1972, while construction output only increased by 9 percent and employment in the sector by 6 percent. These trends are due in part to taxation policies regarding the importation of capital equipment and the growth rate of labor costs. Under certain circumstances capital equipment can be imported tax free while tax credits are given to local entrepreneurs for purchasing capital equipment from domestic manufacturers. 42/ Increases in labor costs have been cited as the reason for the switch to more capital intensive technologies from traditional labor intensive construction. The wage index of common laborers increased 65 percent between 1962 and 1970 while the indices of materials and imported equipment rose only 47 percent. 43/

1. Building Sector Cost Components

In spite of the more rapid increase in labor wages than in materials or capital equipment, the labor component of total residential building costs is relatively small. As indicated in Table 35 the wage component of building costs is only 24 percent while material costs are 54 percent and profits and overheads are about 22 percent. Moreover, in several studies of road construction, labor intensive construction techniques have been found to be 10 percent less costly at market prices than capital intensive construction and 49 percent less costly when shadow priced rates recognizing the social costs of labor and the rental of imported equipment are used. 44/

42/ Slingsby, Ernest. Building Sector Background Study. Prepared for the Urban Operations Review and Support Unit of the Urban Projects Department of the World Bank, 1977. Pp. 57-58.

43/ Sharing in Development, pp. 191-197.

44/ Sharing in Development, pp. 203-207.

TABLE 35
 Building Cost Components
 of Residential Construction

	Percent of Total Cost
Materials	
Raw Materials and Supplies	39.7
Services	<u>14.6</u>
Total Materials	54.3
Wages	23.8
Profit and Overhead	
Depreciation	1.7
Operating Surplus (Profits Included)	19.1
Indirect Taxes	<u>1.1</u>
Total Profits and Overheads	21.9
Total	100.0

Source: Makanas, Elpidio. "Interindustry Analysis of the Housing Construction Industry." NEDA Journal of Development, p. 151.

Estimates of the import component of construction vary. A 1965 review of construction output indicated that 20 percent gross output of private construction consisted of imported inputs, while for public construction the corresponding share was 4 percent. ^{45/} However the imported component of conventional residential construction is estimated to range between 6 and 10 percent of total building material costs. ^{46/} The principal imported inputs are iron and steel products, industrial machinery and parts and general hardware items. The import component of low-income residential construction is likely to be much lower as more indigenous materials are used and higher priced imported materials cannot be afforded by low-income households.

The production of prefabricated housing using highly capital intensive systems has not been economic in the Philippines, particularly for housing aimed at low-income markets. The unit costs of 60 m² prefabricated housing units range from ₱ 250 to ₱ 300 per m² while similar custom built housing averages ₱ 250 per m² (1972 Manila area costs).

^{45/} Sharing in Development, p. 197.

^{46/} Makanas, pp. 152-154.

Furthermore, custom built housing generates up to 23 percent more employment, an important consideration in a labor surplus economy. To achieve sufficient economies of scale to significantly lower residential building costs, an estimated 80 to 90 percent of housing construction would have to be built from prefabricated units. 47/ This has not been achieved in developed countries and would be difficult in the Philippines.

In recent years building costs have continued to rise. The average unit costs of residential construction in Metropolitan Manila increased from ₱ 244 per square meter in 1973 to ₱ 720 in July 1976, an increase of almost 300 percent. Increases in other chartered cities outside Metropolitan Manila were less dramatic, as unit costs increased from ₱ 196 per square meter in 1973 to ₱ 317 in 1975. Nevertheless, these latter increases still averaged 54 percent per annum (see Table 36).

As indicated by the average value of building permits (Table 36), there is a significant variation in construction costs between Metropolitan Manila, other chartered cities and the Philippines as a whole. The July 1976 unit costs of residential construction in Metropolitan Manila were more than double the unit costs recorded in other large chartered cities. These higher costs in Manila are due in part to a heavy concentration of construction activity there, but also indicate the desirability of launching low-income shelter programs in other regional cities.

2. Construction Sector Management and Labor

An important characteristic of the construction sector is that it is composed of a large number of small contractors. Almost 80 percent (870 contractors) of the 1,109 contractors licensed in the Philippines in 1972 had a net worth of less than ₱ 500,000. Furthermore, roughly half of those contractors had a net worth less than ₱ 50,000, while only one contractor had a net worth greater than ₱ 100 million.

Most private sector (formal and informal) construction is done by smaller contractors who are frequently undercapitalized and lack competent staffs. Much of the urban "light construction" is self-contracted in nature. The labor component of this form of construction can range as high as 60 percent of total construction costs.

47/ Sharing in Development, pp. 220-221.

TABLE 36
Building Permits Issued for Private Construction

	All Areas			Manila and Suburbs			Other Chartered Cities					
	Number	Floor Area ('000 m2)	Value ('000 ₱)	Unit Value (₱/㎡)	Number	Floor Area (1000 m2)	Value (₱1000)	Unit Value (₱/㎡)	Number	floor area (1000m2)	Value (₱1000)	Unit Value (₱/㎡)
ALL PRIVATE BUILDING CONSTRUCTION												
1973	20,668	2,655	589,430	222	8,338	1,584	395,318	249	12,330	1,071	194,112	181
1974	16,693	2,461	996,583	404	6,667	1,372	690,370	503	10,026	1,091	306,213	281
1975 (Jan-June)	10,054	1,736	864,759	498	4,061	1,003	659,374	657	6,003	736	205,366	279
RESIDENTIAL BUILDING ONLY												
1973	10,956	1,327	296,737	224	3,622	764	186,603	244	7,334	562	110,133	196
1974	8,718	1,047	358,912	343	2,694	515	208,717	405	6,024	532	150,196	282
1975 (Jan-June)	5,479	638	243,089	381	1,716	343	149,241	435	3,763	296	93,849	317
1976 (July)		n.a.			(Region IV A) 494	766,785	54,977	720	(Region III only) 186	18,793	5,941	320

NOTE: Based on proposed date of construction, floor area and value of construction as estimated by building permits issuing officer.

SOURCE: Journal of Philippine Statistics.

The 1975 Labor Force Survey of the NCSO indicated that employment in construction was about 400,000 or slightly over 3 percent of the total labor force. ^{48/} Residential construction accounted for 25 percent of all construction employment.

3. Building Materials

There are more than 50 building materials industries in the Philippines; however most of them are not producing at capacity. Basically the composition of the formal sector building materials industry is indicated by the number and type of firms registered with the Investment Priorities Plan as of June 1972 (see Table 37).

TABLE 37
Large-Scale Production of Building Materials

Number of Firms	Products Manufactured
37	Plywood, veneer and lumber
11	Cement
14	Metal products
5	PVC products, vitrified or glazed ceramic goods
6	Concrete products, aggregates
13	Glass, paints and specialty products

Source: Building Sector Background Study, p. 56.

Not included in these figures are the numerous small-scale and medium-scale firms that produce the bulk of building materials used in residential construction. Some of these products include: bamboo goods, various vegetable materials such as nipa and cogon, hand-sawn timber, various other timber products, and small-sized precast concrete products.

As indicated above, the Philippines produces cement in several plants located throughout the country. However, present capacity far exceeds demand. Projected demand for cement up to 1980 is expected to consume only 50 percent of

^{48/} Small-scale informal sector employment is not included which, if included, would probably increase the proportionate share of unskilled workers in residential construction.

full production capacity. ^{49/} Fired clay bricks are also produced, but their quality is poor and brick construction tends to be more expensive than concrete block construction.

Recent building materials price data is not available. However, prior to 1970, the retail price index of building materials only increased at an average annual rate of 2.8 percent. Between 1970 and 1973, the index increased much more rapidly, averaging 14.5 percent per annum (see Table 38). Since 1973 price increases, as indicated by unit prices in the valuation of building permits, have risen much more rapidly and have been a major contributor to increases in total construction costs.

TABLE 38
Retail Price Index of Building Materials

Year	Retail Price Index of Building Materials	
	(1965 = 100)	Percent Change
1960	82.3	-
1961	85.8	4.3
1962	88.3	2.9
1963	94.1	6.6
1964	98.4	4.6
1965	100.0	1.6
1966	101.9	1.9
1967	102.7	0.8
1968	104.2	1.5
1969	105.2	1.0
1970	128.8	22.4
1971	149.4	16.0
1972	162.4	8.7
1973	179.7	10.7

^{1/} January to July.

Source: NEDA Journal of Development, Vols. I & II, 1974-75, p. 158.

^{49/} "Achievement of Opportunities for Cost Reduction in Public Construction in the Philippines." Highway Construction, Vol. 1, prepared by the Department of Public Works, Transportation and Communication: Manila, 1974.

4. Building Codes and Construction Related Taxation Policies

Building codes were first enacted in the city of Manila in 1940. Subsequently other cities followed suit. A comprehensive National Building Code has been developed by the Human Settlement Commission, but has not been fully implemented. Zoning regulations also fall within the administrative powers of the Commission. The Code covers all aspects of planning, construction, use of both public and private buildings and applies to all urban areas with populations of at least 2,000 inhabitants. However, it does not apply to "traditional indigenous family dwellings" costing less than ₱ 5,000 which are intended for single family occupancy. ^{50/} Many of the financial intermediaries and housing agencies also have their own sets of codes which restrict the types of structures they will finance. Many of these appear to be excessive in their standards and limit building types to price ranges which are affordable only by small segments of the population.

Residential construction is subject to several types of taxation in addition to real estate taxes. The major national taxes payable by those engaged in housing construction are a 3 percent contractor's tax, a 7 percent sales tax on construction materials, tax on real estate brokers, and tariff duties on imported materials. Local governments also tax persons engaged in construction services, i.e., carpentry, ironmongery, contractors, surveyors, real estate brokers, and building materials manufacturers.

Under certain conditions tax exemptions are granted to enterprises for the importation of capital equipment and to purchasers of domestically manufactured capital equipment. These two exemptions have probably contributed to the switch from labor intensive to more capital intensive technologies. However, reductions in taxable income are also granted for labor training expenses to upgrade the productivity and efficiency of unskilled labor. ^{51/}

^{50/} Mansoa, Manuel T., Jr., "Housing, Building and Land Use Controls." NEDA Journal of Development, National Economic Development Authority, Manila, 1974-75. Pp. 401-403.

^{51/} Yoingco, Angel Q., "Taxation and Housing Policy in the Philippines." NEDA Journal of Development, National Economic Development Authority, Manila, 1974-75. Pp. 385-390.

D. Shelter Finance

1. Background

Expenditures on housing construction during 1968-73 averaged about 2.5 percent of GNP. Due to high national inflation and a tight financial situation housing expenditure dropped to its lowest level, 2.4 percent of GNP, in 1974. However, as the economic conditions improved and construction costs controlled, housing investments improved. By 1976 they were 3.6 percent of GNP (see Table 39).

Virtually all housing construction has been undertaken by the private sector, as shown in Table 39. As mentioned in Chapter III, government housing construction for low-income population has been numerically negligible, with only 13,500 units constructed from 1948 to 1972. Neither the government nor the private sector have related housing to overall development plans which has resulted in an inadequate provision of services as well as employment opportunities near residential areas.

TABLE 39
Value of Housing Construction in the Philippines
(In thousands of pesos, at current prices)

Year	Housing Construction Investment			% Share in GNP
	Public	Private ^{1/}	Total	
1968	1,000	771,000	772,000	2.7
1969	2,000	829,000	831,000	2.6
1970	1,000	895,000	896,000	2.4
1971	1,000	1,021,000	1,022,000	2.3
1972	2,000	1,214,000	1,216,000	2.3
1973	1,000	1,538,000	1,539,000	2.5
1974	n.a.	n.a.	1,500,000	2.4
1975	n.a.	n.a.	2,100,000	3.1
1976	n.a.	n.a.	2,500,000	3.6

^{1/} Includes housing constructed by the private sector and financed by public institutions such as the Government Service Insurance System and the Social Security System.

Source: National Economic and Development Authority (NEDA) and Five Year Philippine Development Plan, 1978-82.

The major portion of housing finance has originated from the private sector. The major sources of formal housing credit have been the Government Service Insurance System (GSIS) and the Social Security System (SSS). Both of these institutions have focused their efforts on families having incomes in the top 10 to 20 percent of the income scale. The Development Bank of the Philippines (DBP) has also been a source of housing finance. The three combined have provided about 20 percent of the estimated ₱ 1,100 million invested in housing in 1971. Private sector involvement in housing finance has been increasing and currently accounts for an additional 20 to 30 percent of investment in housing. 52/ However, the CSIS and the SSS were ordered to suspend large housing projects when the NHA was created.

The following sections discuss public and private sector institutions involved in housing finance, public sector involvement in shelter-related activities, and general constraints on shelter-related finance.

2. Public Sector Shelter Financing

Public Sector financing of shelter-related activities has been small, averaging about 2.2 percent of GNP. More than half of the total public outlays to the shelter sector have gone to the transport sector between FY 67 and FY 75, 9 percent to power and only 5 percent to potable water supplies and sewerage projects. There has also been a very uneven distribution of outlays among various geographic regions. NEDA, when comparing per capita investment in infrastructure and similar shelter-related projects in 1974, found that per capita investment in Metropolitan Manila was three times higher than the national average, while Central Luzon was second with per capita investments which were 50 percent higher than the national average. 53/

Past public sector involvement in housing construction has been negligible, amounting to less than 0.1 percent of GNP. Some projections have indicated that government investment equal to 4 to 5 percent of GNP would be necessary to rectify housing problems in the Philippines. But an investment of this level would be greater than current total public sector investment in all sectors and would involve large subsidies.

52/ Sharing in Development, pp. 214-215.

53/ NEDA, "Regional Distribution of Public Investment", NEDA Development Digest, Vol. 2, April 1975, p. 22.

The World Bank estimates a more realistic goal would be to allocate public funds equal to about 0.2 percent of GNP by 1980. Investment of this nature could provide funds for inexpensive home improvements and low-cost construction of new dwellings for low-income groups not now served by private sector markets.

Projected public sector shelter-related investment is shown in Table 40. The major component of the proposed program is in the transport sector aimed at improving public transportation in Metropolitan Manila and generally improving transport networks in other areas. Similarly, increased spending on water and sewerage projects are projected for Metropolitan Manila and other provincial cities. This total program would increase spending from current levels of 1.4 percent of GNP to 3.9 percent.

The Five Year Philippine Development Plan (1978-82) projects an average annual public expenditure on housing of ₱ 2.6 billion. This expenditure on housing indicates increased involvement in the sector and represents an average of about 1 percent of GNP over the five year period. One third of these funds will be direct budgetary appropriations to NHA, while 26 percent are projected to come from GSIS and SSS funds. The other major source of funds, housing bonds, are projected to generate about 10 percent of the projected public housing expenditure. Local governments' share of these funds, mainly in the form of land, are expected to be small -- less than 1 percent.

TABLE 40
Projected Public Sector Shelter Related Investment

Sector	Average Annual Expenditure (in Millions of Pesos at 1974 Prices)		Share of GNP (in percent)	
	FY 67-75	FY 76-85	FY 67-75	FY 76-85
	Transportation	977	2,410	1.2
Power	117	2,680	0.1	1.8
Rural Electrification	38	330	-	0.2
Water and Sewerage	88	400	0.1	0.3
Housing	1	8,284 <u>1/</u>	-	-

Note: 1/ 1978-1982 includes all public sector shelter-related activities as well as housing financed by parastatals, rural housing, military housing and sites and services.

Source: Derived from Auditor General's Reports, NEDA "Regional Distribution of Public Investment" and the Five Year Development Plan (1978-82).

Roughly 64 percent of the proposed program will be spent on direct housing programs. Upgrading and sites and services programs will consume slightly over one quarter of the total. The remainder will be spent on land assembly and housing-related programs.

Shelter sector finance at both national and local levels is controlled by the decisions of the Budget Commission and the Ministry of Finance since local government appropriations, disbursements and expenditures are governed by the Ministry of Finance and the Ministry of Local Government and Community Development. The ability of local governments to finance shelter projects is limited by their populations and the revenues they can produce. However, only 20 percent of local revenues are retained by city or municipal governments. The remainder is used to support provincial and national programs.

As mentioned in Chapter III, the Real Property Tax Administration program of the Ministry of Local Government and Community Development and the Ministry of Finance should increase local revenues to the point where city and municipal governments can assume a greater role in shelter programs.

3. Housing Finance Institutions and Policies

The following section describes the major institutions which are now involved in housing finance or development projects and gives a brief history of their programs and policies. ^{54/} The Philippines has had a long history of institutions involved in various types of shelter finance. Programs sponsored by these various institutions have been varied and frequently involved heavy subsidies. Furthermore, while membership in these various institutions has included persons from all income groups, the shelter financing policies pursued by most of them have excluded all but a small portion of the population earning incomes above the upper 25th percentile (see Table 41). A summary of the total credits granted by the various institutions is given in Table 42.

^{54/} Housing finance institutions which were consolidated into the National Housing Authority have been omitted. For further details on their operation see the NEDA Journal or the 1972 Housing Sector Assessment. See Chapter III for a description of the NHA and its programs. The finance organizations which are under the jurisdiction of the newly created Ministry of Human Settlements have also been described in Chapter III.

TABLE 41
Percentage of Families Able to Afford Housing Finance

Group	Agency	Minimum Annual Income Required ₱	Luzon %	Visayas %	Mindano %	Philippines %
I	Private	20,000	2.0	1.0	1.0	1.0
II	GSIS/SSS	6,000	19.0	9.0	12.0	15.0
III	NHA	3,000	27.0	19.0	27.0	25.0
IV	Informal	-	52.0	71.0	61.0	59.0

Source: NCSO Survey of Households, Bulletin, Family Income and Expenditure, 1971.

TABLE 42

Number and Resources of Banks, Total Credits Granted by Bank
and Nonbank Institutions for Real Estate and Construction: 1968-73
(Figures in Million Pesos except Number)

	Number (1973)	Resources (1972)	1968	1969	1970	1971	1972	1973
<u>Banks 1/</u>								
Commercial Banks	39	19,998	230.696	254.206	418.682	518.303	569.042	488.083 <u>2/</u>
Real Estate			221.169	247.631	410.211	502.654	517.459	469.648
Construction: Housing guaranteed by HFC			9.527	6.575	8.471	15.649	54.583	18.435
Savings Banks	10	863	111.832	74.860	78.463	158.589	175.370	135.375
Construction			-	.020	.006	.215	.006	-
Real Estate			111.832	74.840	78.457	158.374	175.364	135.375
Development Banks	32	4,752	51.403	42.241	10.346	22.586	77.530	47.229
Contract Construction			.485	.021	1.313	.478	.128	1.257
Real Estate			50.918	42.221	9.033	22.108	77.402	45.972
<u>Nonbanks 3/</u>								
Real Estate			237.300	266.000	243.300	441.600	465.300	447.900
Total			631.231	637.307	750.791	1,141.678	1,287.420	1,118.587

Notes: 1/ Include the following government banks: Philippine National Bank, which accounts for 25 percent of the aggregate resources of the commercial banking system; Philippine Postal Savings Bank, and the Development Bank of the Philippines whose total resources amounted to ₱ 4.552 million. Private institutional credits for housing start at 12 percent interest per annum.

2/ Excludes real estate credit for trade, January to September.

3/ Include Agricultural Credit Administration, Government Service Insurance System, Social Security System, National Investment and Development Corporation, Private Development Corporation of the Philippines, BANCOR Development Corporation, Mutual Building and Loan Associations, Nonstock Savings and Loan Associations.

Source: Central Bank of the Philippines, Statistical Bulletin, 1972 and the Department of Economic Research. Country Monograph, p. 39.

Social Security Funds

The Government's two social security funds, the GSIS and the SSS, had combined assets of ₱ 5.4 billion at the end of FY 73. The former is the larger of the two as its membership is government employees whose contributions are obligatory. Contributions to both funds in the 1960's and early 1970's grew more slowly than GNP. However both funds are projected to increase faster due to increased Government incentives and improved benefits. If they reached the projected 1.8 percent of GNP by 1985, they would be an important source of housing finance.

Both the GSIS and SSS stopped direct funding of housing projects after the creation of the National Housing Authority. The SSS however still grants individual housing loans to its members. Both funds remain a source of institutional finance even if they do not directly fund housing projects. The following is a description of their past operations.

Government Service Insurance System (GSIS)

The GSIS embarked on a nationwide low-cost housing program for its members in 1970. By 1975, ₱ 355.78 million had been spent to complete 14,500 units which represented 29 percent of its total program and 89 percent of its total capital commitment of ₱ 398.71 million. Table 43 provides a summary of GSIS financed and administered projects as of the end of 1975. It should be noted that the average value of the units directly financed by GSIS was slightly over ₱ 30,000, while the average value of units built by developers and administered by GSIS was ₱ 17,677.

The primary requirements for any applicant to receive a loan from GSIS were that the applicant must be a GSIS member in good standing, have a minimum monthly income of ₱ 400 and meet other financial requirements. During 1962-72, 46,000 member borrowers used GSIS funds and the average loan was approximately ₱ 23,000. The borrowers, representing 8 percent of the total membership in 1970, had average monthly family incomes in the highest 20th percentile. The GSIS was making 10 to 25 year housing loans at 6 percent per annum on amounts less than ₱ 30,000 and at 12 percent on amounts from ₱ 30,000 to ₱ 70,000.

TABLE 43

Combined Output of GSIS Financed and Administered Projects
(As of December 1975)

	Area (Hectare)	Loan Approved (₱ million)	Amount Released (₱ million)	Number of Units Programmed	Number of Units Completed	Number of Units Turned Over	Average Unit Cost
GSIS Assisted	1,303.23	253.11	237.98	41,996	7,881	5,542	30,197
GSIS Administered	317.82	145.60	117.80	7,584	6,664	6,361	17,677
Grand Total	1,621.15	398.71	355.78	49,580	14,545	11,903	24,460

Source: NEDA Journal of Development, p. 72.

Of particular concern is that GSIS provides subsidized loans to upper-income members and uses members' contributions to invest in short-term money market instruments to offset subsidies on loans to their members. Thus lower-income members, whose contributions are obligatory, actually subsidize upper-income members, but are excluded from loan programs.

Social Security System (SSS)

From 1957, the inception of its housing loan program, until 1975, the SSS had financed a total of 43,188 units involving a cash outlay of ₱ 994 million. Roughly 84 percent have been financed since 1966 representing an average loan sum of ₱ 21,590 (see Table 44). SSS's stated goal in providing housing finance is to reach low-income groups, i.e., those earning less than ₱ 500 per month, a group representing 88 percent of SSS members. However, in spite of more liberalized housing policies introduced since 1967 aimed at reaching lower-income groups, less than 10 percent of SSS membership benefited from SSS programs.

TABLE 44
Housing Loan Program of the Social
Security System: 1957-1975

Year	Disbursements	Percent	Number of Units	Percent	Average Loan
1966	51,399	5.17	2,335	5.41	22,010
1967	78,721	7.92	3,644	8.44	21,600
1968	83,002	8.35	4,049	9.38	20,500
1969	58,604	5.89	3,560	8.24	16,460
1970	103,794	10.44	5,235	12.12	19,830
1971	112,445	11.31	5,666	13.12	19,850
1972	24,874	2.50	1,194	2.76	20,830
1973	82,001	8.25	4,668	10.81	17,570
1974	71,940	7.23	2,984	6.91	24,110
1975	135,466	13.62	2,898	6.71	39,890
Subtotal	802,246	80.68	36,233	83.90	21,590
1957-1965	153,006	15.39	6,955	16.10	22,000
NHC	39,131	3.93	-	-	-
Total	994,383	100.00	43,188	100.00	21,660

Source: NEDA Journal, p. 84.

As of 1972, SSS provided mortgage loans over 25 years at 6 percent per annum on 90 percent of the appraised value of the house. In an attempt to service lower-income groups (defined as earning between ₱ 300 and ₱ 700 per month), SSS has joined with local developers to construct condominium units. Like the GSIS, the SSS uses member contributions to invest in short-term money market instruments to offset the subsidies on loans to members.

Development Banks

The primary development bank providing housing finance is the Development Bank of the Philippines which is authorized to promote private development banks throughout the country. As the end of 1972 there were 31 private development banks with total assets of ₱ 4,752 million of which ₱ 4,552 million was held by the DBP. The development bank system provides housing loans at 12 percent per annum over five to ten years. To qualify applicants must earn the minimum wage, own the lot to be developed and meet other criteria. The plot itself must have a minimum area of 150 square meters.

Savings and Loan Associations

By the end of 1972 there were 35 stock associations and 65 nonstock associations under Central Bank supervision with combined resources of ₱ 158.2 million. Presidential Decree 113 (January 1973) redirected the lending activities of the savings and loans towards servicing housing finance needs by stating that they shall provide members with loans equivalent to four months salary plus accrued savings over 20 years at current interest rates.

Other Private Sector Institutions

Building and loan associations, insurance companies and cooperatives have also been a secondary source of housing finance. The bulk of their investments, however, have been in real estate and not in actual housing finance.

4. Credit Policies

Traditionally there has been a shortage of long-term credit facilities available for housing investment due in part to interest rate structure, the low level of household savings, in recent years averaging about 5 percent of GNP, and the preference for short-term money market instruments. The primary determinant of domestic savings during 1951-74 was the growth of incomes. The drop in real urban incomes over the period has resulted in a stagnant level of household savings. Further, larger savers have dominated the market. During the 1960's the private sector showed a preference for direct holdings of tangible assets, i.e. household incomes were absorbed by residential construction, automotive equipment and consumer durables. During the early 1970's the pattern changed somewhat as there was a shift from longer-term to shorter-term financial instruments due to the combination of rapid inflation, fixed low rates of savings and time deposits, tax and institutional impediments to the placement and acquisition of longer-term securities and the low rates of return on life insurance, the latter traditionally an important source of housing finance.

In 1974, interest rates on savings and time deposits which ranged from 5 to 9.5 percent were increased to 6 to 11.5 percent and administrative ceilings on longer-term deposits were lifted. Nevertheless, high rates of inflation rendered real deposit yields more negative than they had been during 1956-74 (see Table 45). At the same time unregulated money market rates rose to levels well over 30 percent during 1973-1974. Thus, the growth of long-term deposits lagged behind other forms of investments. As a result, by the end of 1974, total short-term instruments were equal to 82 percent of total medium- and long-term instruments and savings deposits in banking institutions. Furthermore, the structure of credits granted by the banking system over the last two decades indicates that over 95 percent of the total credit granted has been in the form of demand and short-term loans, i.e. those of less than one year.

While recent attempts to reform the financial system by the Central Bank have increased both deposit rates and lending rates on instruments having maturity periods greater than two years, there has not been a major shift away from short-term investments. In spite of a drop in inflation from 34 percent in 1974 to 10 percent in 1975, long-term credit for housing has remained scarce. For low-income groups housing finance from formal sector sources remains nonexistent. Table 46 shows the revised Central Bank interest rate structure as of January 1976. The impact of these credit policies at local levels is further discussed in Volumes II and III.

TABLE 45

Annual Average Nominal and Real Interest Rates
for Selected Assets, 1956-74 (in percent)

Year	Savings Deposits		Time Deposits		Government Securities ^{a/}		Deposit Substitutes ^{c/}	
	Nominal	Real ^{b/}	Nominal	Real ^{b/}	Nominal	Real ^{b/}	Nominal	Real ^{b/}
1956	2.00	0.60	2.25	0.80	4.69	3.25	n.a.	n.a.
1957	2.25	-1.70	2.75	-1.20	5.65	1.59	n.a.	n.a.
1958	2.25	0.10	3.25	1.00	4.83	2.57	n.a.	n.a.
1959	2.25	-0.20	3.25	0.80	6.06	3.58	n.a.	n.a.
1960	3.00	-2.10	3.50	-1.60	7.38	2.07	n.a.	n.a.
1961	3.00	-0.10	3.75	0.60	3.06	-0.40	n.a.	n.a.
1962	3.00	-3.90	2.75	-3.20	3.40	-3.54	n.a.	n.a.
1963	3.50	-4.70	4.25	-4.00	5.54	-2.82	n.a.	n.a.
1964	3.50	-1.10	4.50	-0.10	5.45	0.81	n.a.	n.a.
1965	4.50	0.60	6.25	2.30	8.89	4.80	n.a.	n.a.
1966	5.75	0.10	6.25	0.50	6.69	0.94	n.a.	n.a.
1967	5.75	0.10	6.25	0.50	8.25	2.41	n.a.	n.a.
1968	5.75	0.40	6.25	0.90	9.63	4.11	n.a.	n.a.
1969	5.85	-0.10	6.50	0.60	6.32	0.40	n.a.	n.a.
1970	6.00	-7.40	7.00	-6.60	12.17	-2.03	n.a.	n.a.
1971	6.00	-7.70	7.00	-6.80	12.03	-2.51	13.30	-1.31
1972	6.00	-2.80	7.00	-1.90	13.49	4.02	13.90	4.40
1973	6.00	-7.00	7.25	-5.90	15.05	0.92	9.40	4.03
1974	6.25	-20.40	10.00	-17.60	16.54	-12.72	31.80	-1.27

a/ Yields on Government securities (which are tax free) have been recalculated on a before tax basis (at a 35 percent tax rate) to be comparable with the rest, which are fully taxable.

b/ Deflated by the rate of increase of the GNP deflator (1967 = 100.0). Interest rates shown are the average rates on new issues.

c/ Weighted average of all maturities.

Source: Central Bank Statistical Bulletins, and Report of the Inter-Agency Committee on the Study of Interest Rates, March 12, 1971.

TABLE 46
 Maximum Interest Rates of the Banking System
 January 1976 (in percent per annum)

Deposit Rates	Commercial Banks	Thrift Banks
Savings deposits	7.0	7.5
Time deposits		
3 months	8.5	9.0
6 months	9.0	9.5
1 year	10.0	10.5
1½ years	11.0	11.5
2 years	12.0	12.5
over 2 years	no ceiling	no ceiling
<u>Lending Rates</u>	<u>Commercial and Thrift Banks</u>	
Up to 2 years	12-14 <u>1/</u>	
Over 2 years	19 <u>2/</u>	
<u>Yields from purchases of receivables and other obligations</u>		
Up to 2 years	17 <u>2/</u>	
Over 2 years	no ceiling	

Notes: 1/ Excluding other charges of up to 2 percent for commercial banks and up to 3 percent for thrift banks.

2/ Including all other charges.

Source: Central Bank.

5. Unconventional Housing Finance Systems

Several innovative attempts have been made to bridge the gap in the housing finance system. Although many of these attempts have been small and have had implied subsidies, they represent different approaches to extending credit facilities to low-income groups which previously had no access to them. More importantly, these unconventional approaches to housing finance have sought ways of harnessing the resources which exist in low-income areas rather than importing techniques from other areas. 55/

55/ Keyes, William J. and Maria C. Roldan Burcroff. Nonconventional Approaches to Housing Finance, submitted to the United Nations Center for Housing Building and Planning, New York: 1975. Pp. 50-73.

Davao Development Foundation Village

The Davao Development Foundation (DDF), a nonprofit corporation, was created to promote socioeconomic development in Davao City. In 1975, it developed a housing project for 2,400 squatter families covering about 81 hectares. In attempting to match housing costs and standards to their capabilities, it developed core housing using inexpensive, local materials on six different housing lot options. Although it received land at a concessionary rate of ₱ 1.00 per square meter, development costs were kept at a minimum of ₱ 10.00 per square meter. However, initial housing costs were high, ranging from ₱ 11,700 to ₱ 21,700, but the foundation hopes to reduce them to ₱ 8,500.

Financing procedures were also innovative. There was no down payment, but the applicant had to advance an amount to cover various permits and fees. While the applicant's loan was being processed by the SSS, his employer granted working capital loans of ₱ 1,500 to cover initial expenses. After the SSS loan had been granted, repayments were made through salary deductions. If the applicant was not an employee of a participating employer, the DDF assisted him in getting bank loans of ₱ 1,500 prior to SSS loan approval.

Several constraints mitigate against the foundation's success however: the standards imposed by the GSIS and SSS as prerequisites prior to loan approval are high and result in high building costs; subdivision laws require large lot sizes; and construction logistics are often uneconomic due to the unpredictable flow of funds from lending institutions.

Kasanyangan

Kasanyangan is a housing cooperative in Jolo which began as a credit cooperative but attracted a large number of low-income members. In 1973 when a large number of squatters were faced with eviction from their homes, a member of the cooperative responded by offering to sell a 32 hectare site to the cooperative at ₱ 5.00 per square meter at no interest over 20 years. Using the land as collateral, the cooperative obtained a ₱ 700,000 loan at 9 percent over 20 years from the Development Bank of the Philippines to develop housing. By 1974, 50 units had been constructed costing ₱ 7,000 per unit.

The cooperative is staffed by volunteers. Prospective members are required to attend intensive training programs prior to admittance. The cooperative also runs various commercial and social operations in the development passing benefits on to members.

Credit Cooperatives

Credit cooperatives have had a mixed history in the Philippines; however, some of them have been very successful. For instance, the San Dionisio Credit Cooperative Inc., of Parangue, Rizal, in 1971 had a total membership approaching 7,000 and assets exceeding ₱ 2 million. Since 1961 it has loaned out more than ₱ 9 million mostly in small amounts. Its default rate has been low, as only 2 percent of the borrowers have required extensions, and confiscation of collateral is rare. The cooperative attributes its success to premembership training seminars. In fact training is given greater emphasis in loan approval than collateral. As a result only 1 percent of its loan applications have been rejected.

While home improvement loans have accounted for only 5.5 percent of all loans granted by the cooperative in 1974, the credit cooperative is a strong instrument for non-conventional housing finance.

6. Informal Sector Finance

The United Nations Center for Housing Building and Planning sponsored a study of housing finance in low-income areas of the Philippines in 1975. ^{56/} Its results indicate patterns and priorities for low-income housing finance. Less than one fourth of those interviewed used some form of housing finance. Furthermore, the amounts they tended to borrow were small, usually less than ₱ 500. Repayment schedules, interest and collateral arrangements were treated casually since most sources of credit were relatives or friends. Although the low-income residents were aware of formal sector financial institutions, these institutions were viewed as inaccessible.

^{56/} Keyes and Roldan Burcroff, Nonconventional Approaches to Housing Finance, pp. 50-73.

After food and clothing, most of the low-income families indicated a willingness to borrow capital for income generating activities. Loans for housing were the fourth priority in their credit needs (see Table 23, Chapter II. B.). However, when asked about loans for larger sums, the interest in credit for housing increased. These trends probably indicate an understanding of the costs of construction as well as the priorities of low-income families lacking secure tenure and reliable income sources.

Repayment periods tended to be short, usually not exceeding one year. However, for larger-sized loans, the repayment time was frequently not specified. Default was not viewed as very serious in the credit process, as many respondents felt that falling behind in payments merely meant that the repayment period would be extended.

7. The Construction Process

Building the squatter house is a continuous process: new rooms are added, leaky roofs repaired, inferior materials are replaced with better materials or general enlargements are made to the building. These improvements frequently continue to take place in spite of government prohibitions against further development. Furthermore, squatters are aware of the increased value these improvements add to their residences.

Very small amounts of finance are used in the process, however. Building materials are frequently salvaged from other construction sites, demolished buildings, or garbage dumps. However, many low-income home builders purchase these materials at low prices and transport them long distances to their building sites. Expenses for labor frequently consist of food and drink for communal self-help. Only a very small number of squatter homebuilders hired labor.

In spite of this seemingly haphazard method of construction, the value of housing in squatter areas increases from year to year as more renovations are made. The major reason for not making more substantial renovations was the fear of eviction. Although not specifically mentioned in interviews, the lack of tenure combined with fluctuating incomes probably also constrains the take-up rate of housing loans as well. 57/

57/ Keyes and Roldan Burcroff, Nonconventional Approaches to Housing Finance, pp. 50-73.

Chapter V

PROSPECTS AND ANALYSIS: THE IMPACT AT THE LOCAL LEVEL

A. Introduction

The foregoing chapters have reviewed the overall dimensions of the shelter problem in the Philippines, the characteristics of the low income urban population, and, most importantly, the institutions and programs which the government has developed to deal with the shelter problem. Given the concentration on provincial cities in this SSA, this chapter focuses on the operation and performance of these programs on the local level using the public administration and urban development programs of Angeles and Olongapo Cities as illustrations.

Volumes II and III of this SSA describe in detail the dimensions and components of the shelter problem in these two cities. Based on the findings of the two city studies, alternative approaches and possible projects designed to meet the shelter needs -- defined broadly -- of lower income groups are recommended. Before proceeding to the programs and projects recommended in the subsequent volumes, however, it is necessary to ascertain how well the local operations of the relevant national programs are dealing with various aspects of the shelter problem, including the related socio-economic components. Following, therefore, is an evaluation of the urban development effort in each city according to its institutional, physical, and socio-economic characteristics.

B. Angeles City

1. Institutional

City Government

Officially the Mayor's office is supposed to be in control of all the city's development efforts with formal clearance and approval from the Sangguniang Byan, i.e. the city council. As is the case in most cities of the Philippines, however, the major department heads are appointed by the President, i.e.

they are national civil servants and not local. Their salaries, however, are paid from city revenues.

In the case of Angeles, the City Treasurer and the City Engineer are not only national appointees, but also do not live in the city. This situation, which has evolved from a national assertion to control most development efforts, leads to a lack of control over same by the Mayor and his staff. Further, since most department heads do not rely on the mayor for their appointments, their loyalties and often concerns for responsible administration of their functions lie elsewhere.

Also included in the city government structure are members of national department offices and advisory committees. The independent function of the national department offices in combination with the number of advisory committees makes the coordination of city government extremely difficult. In Angeles, for example, there had been a continual under-estimation of revenues by the City's Treasurer's Office leading to noncertification of items to be included in the monthly supplementary budgets, i.e. those expenditures over and above those included in the annual budget. Control of these supplementary expenditures are extremely important in guiding and stimulating the overall development of the city. In order to gain control over the approval of these expenditures, the Mayor directed that a supplementary budget not be submitted for one month. However, the following and subsequent months a supplementary budget was drawn up based on actual cash receipts allowing the Mayor to know exactly what funds could be expended.

The City Planning and Development Staff

The Mayor's strongest support for administration and guidance of city development comes through the City Planning and Development Board. The CPDB, created under a Memorandum Circular of the MLGCD in 1975, is chaired by the Mayor and composed principally of city department heads, representatives of the private sector, and a member from the city council. The Board, however, acts as the formal approval authority for the plans and proposals submitted by the City Planning and Development Staff (CPDS), headed by the City Development Coordinator (CDC). Thus, the CPDS, all of whom are appointed by the Mayor, are his major technical support for initiating city development projects and controlling overall growth.

Although the positions were created in October, 1975, by mid 1978 several had not been filled while others had already been vacated. Due the very low salaries attached to the positions, most of the present staff, while highly motivated, are young and inexperienced. Only the City Development Coordinator has any actual development experience. While the SSA Team was in the city, the staff was undertaking feasibility studies for two new markets in the city. Although a format for undertaking the studies had been distributed by NEDA, the staff was having difficulty in assembling the data and following the instructions. In assisting them, it was found that the provision of simple hand calculators with instruction booklets would greatly increase their efficiency. In addition the staff was crowded into a one room office above the city market.

If the city is to undertake major development projects, it was stressed to the Mayor that the staff would have to be substantially strengthened, filling the vacancies and raising salaries when possible. As this effort coincided with the entry of the city into the CDAP/RSC program, the Mayor was taking definite steps to fill all vacant positions by September 1st. ^{58/} In order to strengthen and train the staff in shelter project design, such as community improvement and sites and services schemes, however, both short and long term technical assistance will probably be required; the former for actual project design and latter for sustained support and training in project execution and management.

2. Physical

Housing

As yet the national housing programs has not reached Angeles. Although the Ministry of Human Settlements is planning to field Human Settlements Officers (HSO's) in all chartered cities, these will only be forthcoming in October 1978. Further, since the HSO will be appointed from the local public or private sector, it is not yet known how they will interact with the CPDS and other local representatives

^{58/} A sociologist had been hired, an engineer was being interviewed and a management specialist was to be obtained from the existing staff.

of national offices. Since the HSOs will only be receiving an honorarium and will be employed fulltime elsewhere, they will not be doing major project development work. Their most useful role would be to coordinate activities in the shelter sector, perhaps channeling funds from the NHA and/or the new national mortgage bank for this purpose.

While the NHA has begun operations in regional cities such as Davao, Cebu, and Cagayan de Oro (the latter is also a CDAP/RSC city), its program has not yet reached sub-regional cities like Angeles and Olongapo. Thus, up to now, there has been no nationally funded shelter programs for low income settlements in the city.

As mentioned in the Angeles City report, the city itself has undertaken a resettlement project in Capaya, 3½ kilometers east of the city proper. The resettlement scheme, mainly for squatters on city land, is actually a low standard sites and services project composed of 386 one hundred square meter lots. Although only about 250 plots are occupied, very few families have returned to the city and those who were interviewed were quite satisfied with their plots. The city owns three more hectares in the areas and is planning to buy more.

Given the fact that the new city hall is to be constructed nearby and the city Framework Development Plan calls for a general eastward orientation, the area should be further investigated for comprehensive sites and services development. The existing site could be improved while higher standard serviced plots with and without core housing could be provided in adjacent areas. According to the analysis in the Angeles City Report, there is a substantial backlog of demand for housing among low income families. Costs could also be kept low due to the low price of land in the areas.

Perhaps the major constraint to relieving the backlog of demand for shelter and related services in the city is finance at affordable terms. Presently no long term mortgage loans are being made by either private or government banks in the city. Housing loans from the GSIS are under a moratorium and one has to be a member of the SSS to qualify for a loan of up to P 50,000 at six percent.

While many banks do not give housing loans per se, if a lot has been secured, it can be used for collateral for a commercial or agricultural loan. These short term loans are made at 14 percent for one year and 16 percent for three from the Philippine National Bank or the Manila Bank. The best terms seem to be from real estate developers at 10 percent for 10 years with no down payment.

Chapter III, section D of the Angeles City Report gives details of the local financing situation. From the foregoing, however, it can be seen that if the mass of the housing demand, i.e. that portion between the upper income groups and the indigent, is to be met, financing on affordable terms must be supplied. Although the government is moving in this direction with the creation of the Ministry of Human Settlements, the Home Finance Corporation and the National Home Mortgage Finance Corporation to support the programs of the NHA, it will be some time before these institutions are organized and their operations reach provincial cities. Once the NHA's staff is reorganized and perhaps decentralized, its programs in sites and services and/or squatter upgrading could have an effect in Angeles.

In the meantime, however, in order to address the shelter problems described in the city report, long term funds are urgently needed. According to the preliminary feasibility studies undertaken for the city reports, serviced sites (some with core housing) and infrastructure for community upgrading can be afforded by families well below the median income level at terms of 11 percent for 30 years. It must be emphasized, however, that this is possible only if development standards are kept low and center city land costs are financed separately by the city for the community improvement schemes. If the land is conveyed to the occupants on long term leaseholds, the city could realize some income from this component while keeping the development costs low. Feasible standards and costs, affordable on the above terms by families earning down to P 200 per month, are described in detail in Chapter IV of Volume II.

Infrastructure

While the condition of the roads and surface drainage are good in areas where they are provided, the high standards of these systems have meant that they have not been provided uniformly throughout the city. Many low income areas lack paved streets and drainage entirely. Moreover, the choice of an all underground drainage system combined with concrete paved streets makes maintenance and modification of the system difficult. The use of relatively similar standards of road construction irregardless of land use or traffic densities has resulted in a system which can only be economically justified in high income areas or business districts. As a result, relatively little new road construction has occurred and the drainage master plan has not been fully implemented.

The city engineer's office, which is in charge of the design and construction of infrastructure, is also in charge of determining and enforcing the standards of private subdivision construction. Although the bulk of its budget is from the city treasury, the city engineer's office is under the direct supervision of the Ministry of Highways and its top officers are national appointees. Since the standards used for most construction have been developed by the Ministry, there is little local control over the design and implementation of infrastructure projects.

City and barangay roads are constructed by the department's permanent force account staff. Since that staff is on the regular city payroll, its costs are not billed directly into construction costs. As such there is no comprehensive cost accounting nor incentive to seek less costly solutions.

Road construction standards should be graded to the intensity and type of land use of the area being serviced. Residential areas where the density of vehicular traffic is low could be served with narrower width streets having lower standards of surfacing than busy commercial areas. Properly contoured residential street formations can serve as secondary drainage channels which drain into main drainage arteries. Such a system would cut down on the amount of underground drainage channels required and would significantly reduce overall development costs.

Utilities

1. Water. The City of Angeles does not participate in any national programs for the supply of potable water; instead it relies on nine public and private water systems. While the service areas of these systems do not overlap, they do not provide uniform levels of service or have standardized billing procedures. The private systems, which serve more consumers than the municipal system, are metered and charged higher rates for consumption. Since their profit margins are regulated by the National Water Resources Authority, and these must rely entirely on revenues for their operations, they tend to be more efficient in both monthly collections and supplying water.

The Angeles City Waterworks System (ACWS) suffers from the lack of a consolidated management. While operations and maintenance are under the control of the city engineer, the collection of user charges and the system's fiscal management are under the city treasurer. Almost all of the system is unmetered and the efficiency of monthly collections is about 69 percent. As a result, there is no real monitoring

of the system's finances and revenues are only meeting about 60 percent of the system's operating costs.

The ACWS has also suffered from the lack of a comprehensive capital improvement program. Systematic maintenance and repair of the system have not occurred, and much of the distribution network requires replacement. Due in part to the system's duplicate management, a P 10 million program to upgrade and extend the system has waited over eight years to be implemented.

Due to the problems which the city engineering department has encountered in providing its diverse services, it would seem that the city waterworks would function better as an independent body. In particular it would function better if it had full control of its own finances and operations. Such a department could be set up either as a water district under Local Water Utilities Administration or as an autonomous department under the mayor. In either case, it should implement a program of metering its connections, gradually increase rates to economic levels, increase its efficiency of collections, and devote a larger share of its budget to ongoing maintenance as well as implement its proposed capital improvement program.

2. Sewerage. The lack of either national or local standards for the provision of sanitary sewerage or solid waste disposal is manifested in the inadequate manner in which these services are provided. In Angeles City, the Capaya resettlement scheme was developed without any provisions or control over sanitary or solid waste disposal. The provision of these services was left to the low income households inhabiting the site.

While the city health office does have sanitary inspectors charged with inspecting private sewage systems, the office operates on complaint only. It does not have the staff or budget to implement city-wide environmental control measures. Thus, environmental sanitation is left more or less in the hands of private developers and many low income areas lack adequate sanitation.

Programs such as the public health office's environmental sanitation training should be expanded to include funding for construction of improved sewerage facilities. Small loans could be given to participating low income households to construct septic tanks, improved pit latrines or install toilet facilities. Capital used for the program could be loaned to low income households at reasonable repayment terms.

3. Solid Waste Disposal. Since the Department of Public Services (DPS) which is in charge of garbage collection is under the city engineer's office, its budget and operating procedures are not under its control. Due in part to this lack of budgetary control, maintenance of its equipment has lagged and much of it requires replacements. Presently, collection services are subsidized by the city budget as the "Garbage Fee Ordinance" is not enforced. As a result, the DPS staff and its poor equipment are unable to service all areas of the city and only about 50 percent of the city's solid wastes are collected.

The DPS might better be restructured into an autonomous department under the mayor, but be in charge of collection of garbage fees and its operations. While it may be simpler to charge all consumers a flat rate according to the frequency of collection and type of land use, the DPS should also investigate the feasibility of providing different levels of service according to the land use and density of a service area. Many residential areas where the intensity of garbage production is small could be serviced less frequently than busy commercial areas such as markets. At any rate, the department should be in control of its finances, and should initiate a gradual program of renewal and expansion of its present equipment and operations.

4. Power. Since electric power is supplied by a private corporation which is in turn regulated by the National Power Corporation and the Ministry of Energy, the local government has almost no role in the management of power supplies. This lack of control affects other city programs. For example, while there is legislation regulating connections to the system and requiring that prior to connection a building permit must be obtained, in actual practice the city has not been able to control connections. This has been partly due to the lack of enforcement of building permits by the city engineering office, but is also due to the lack of coordination between the city government and the electric utility.

There is also a lack of local participation in establishing rate structures and levels of service. Changes in rate structure proposed by the utility are now approved by the Board of Power, a national body, as well as service priorities and service areas. In the latter case, a municipality can request service by a particular type of utility, but actual approval of the application for service is made by the Board of Power.

3. Socio-Economic

Social

The Ministry of Social Services and Development (MSSD) plans programs at the national level. Funds are disbursed from the national to the regional office and from there to the local branches. The programs are well designed to increase the productivity of low income members of society. However, staffing in Angeles is insufficient in both training and quantity to implement the programs efficiently. Less than a quarter of the staff have degrees in social work; the others having studied other social sciences and the humanities.

Management of the small business loans, Self Employment Assistance Program, demands technical skills of a type not normally possessed by a social worker. Key MSSD officials have received training in small business administration but this has not filtered down to the lower levels where day to day implementation occurs. Hence, only 30 percent of the loans granted are repaid. Similarly while the Skills Training Program was designed at the national level and intended to provide training that would lend to jobs on the local level, the local MSSD office is having difficulty placing the trained graduates. Market studies of local job opportunities should be conducted and the training program geared to meet those needs.

Another gap between national level policy and local level implementation relates to the overlapping concerns of various ministries. For example, the Family Planning Organization of the Philippines, the Population Commission, the Department of Health, and the Ministry of Social Services and Development are all active in family planning. The latter two agencies, along with the Department of Education, the City Nutritional Council, and private civic organization also carry out nutrition programs.

Economic

The economy of Angeles City has been largely dependent on activities related to the US Air Force Base. Since the end of the Viet-Nam War, however, these activities have suffered a decline. Economic efforts are consequently becoming more directed at satisfying the needs of the local population and at identifying export markets, especially in furniture.

Angeles is well situated to develop within the context of national development plans to disperse industries, especially those processing domestic raw materials. Located between the raw material production areas in the north and markets in Metro Manila, it is on the major national power grid and transportation network. Angeles is thus in a good position to benefit from the ban on the establishment of certain types of industries within a 50 kilometer radius of Metro-Manila. However, it is still close enough to take advantage of markets located in the Metro Manila area.

Along with its expanding furniture industry, traditional woodcraft building materials industries could be encouraged to upgrade the quality of their products. These products are the backbone of most low income housing construction in Angeles as well as in the Philippines. For example, capice and wooden window systems could be improved by standardizing shapes and using treated wood. Various types of bamboo wall panels could also be developed for local house construction and export. To this end, there is scope for the design and development of cottage industries such as Barrio Extension using home craftsmen/assemblers to satisfy the demand for furniture and other wooden products.

C. Olongapo City

1. Institutional

City Government

Olongapo City suffers from essentially the same situation as Angeles vis a vis its department heads; i.e., the major ones are national appointees. This phenomenon has led to a lack of coordination in the city government, especially in the City Treasurer's offices. For example, according to the summary of revenues and expenditures in the Socio-Economic Profile of the city, the city's finances are in surplus. Upon further investigation, however, an outstanding loan from the National Power Corporation consolidating a back debt of nearly P 20 million was discovered. At 14 percent for six years, monthly payments to amortize this debt are a continual burden on city revenues. According to the Mayor, the city can barely meet the interest payments.

Further, in 1976 fully 63 percent of the total income for the general fund was realized from the operation of the electric public utility. However, under PD. 477, income from the operation of public utilities cannot be used for general

city government operations. Thus, the city could rely only on revenues from other sources comprising only 37 percent of its total income. Given the rather precarious state of the city's finances, it is strongly felt that short term technical assistance in public finance should be provided.

Although the RPTA has passed the city council and procedural manuals have been issued, the City Assessor has not begun to prepare the tax maps. Implementation of this program should have a major effect on the city's revenues, since real property tax collections were only 4.2 percent of total revenues in 1976 and only 40 percent of total collectibles in the first half of 1978. The City Assessor should therefore take the initiative to implement the RPTA.

In addition to increasing revenues, the city could also take steps to reduce staff, particularly in the Public Utilities Department and the Offices of the City Treasurer, Engineer and the Mayor. The city government is definitely overstaffed for its scale of operations; and given its large administrative expenditure, could substantially reduce a portion of its temporary staff. Although it is a politically difficult decision, the Mayor is aware that the payroll will have to be reduced before the city can undertake any new activities or assume any additional debt burden.

City Planning and Development Staff (CPDS)

Although the Olongapo CPDS is larger (16) and older (four years) than that of Angeles City, it too is inexperienced and has vacant posts that remain unfilled; a management analyst, fiscal analyst, an economist, and a sociologist. In addition, the staff has been given many tasks unrelated to its prime function. These include checking all requisition vouchers before expenditure (in addition to the City Treasurer's office), assisting the Mayor in the management of the City Hospital, and designing all city buildings plus some drainage plans. Thus, in order to adequately prepare and execute projects such as described in Volume III, the CPDS not only has to be built up, but its unrelated functions have to be taken over by the relevant departments.

In addition to the short term technical assistance in public finance mentioned above, similar short and long term technical assistance to that suggested for Angeles will be required for Olongapo; i.e. for actual project design and long term, sustained support and training in project execution and management. Since the Mayor is already making extensive

use of the CPDS, this support should allow it to fulfill the role in planning and controlling city development foreseen for it in the CDAP program.

2. Physical

Housing

Similar to Angeles, there are as yet no activities of the national housing program in Olongapo. While individuals have received loans from the SSS and the GSIS and there are nascent efforts to form housing cooperatives, there have been no comprehensive efforts on the part of the national housing agencies to address shelter problems in the city. As mentioned above, these could be forthcoming as the new agencies of the Ministry of Human Settlements become organized and operational and as the National Housing Authority decentralizes its operations.

In 1969, the city undertook a resettlement scheme in Gordon Heights for squatters along the north perimeter road opposite the U.S. Naval Base. A total of 500 families were relocated on 450 square meter plots. However, no facilities or utilities were provided except a gravel road. Thus, the squatter families sold their lots to speculators and returned to the city. On a higher income level, five subdivisions have been developed by private developers with financing mostly from the GSIS and the SSS. However, due to a lack of effective demand and long term financing, the subdivisions are completed. The latest, which opened in December 1977, has only a third of its area under construction.

As in Angeles, and probably in most other CDAP/RSC cities, housing finance for low-income groups is non-existent. For middle and upper income families finance is extremely scarce as evidenced by the fact that the sole savings bank in the city has made only 156 loans in seven years of which about 28 percent are in arrears. Interest rates are similar to Angeles, i.e., 12 percent plus three percent service charge for one year and 19 percent for a maximum of three years. Thus, long term funds at 10 to 12 percent are also urgently required for shelter development in Olongapo.

In Olongapo, however, some of the projects suggested in Volume III benefit the city as a whole. ^{59/} It is therefore recommended that these components be financed separately and not charged to the project households. As will be seen in Volume III, the remainder of the components, such as roads, footpaths, water supply, and septic tanks which are cost recoverable, can be afforded by families well below the median income on terms of 11 percent for 30 years.

In addition to finance there is another constraint to project development; i.e. enough well located, developable land for a low income sites and services scheme to relieve high densities in the center city. As is pointed out in the city report, while practically all of the city's land is in the public domain and therefore without cost to the city, the city is definitely short of developable land within easy reach of employment opportunities. Additional site selection activity must therefore be carried out before a feasible sites and services scheme can be developed.

Infrastructure

1. Roads. The poor condition of the soils combined with frequent heavy rains and the lack of nearby construction materials make road construction costly. To further compound transportation problems, much of the existing road network lacks sufficient sub-base. Thus road beds are unable to withstand increasing vehicle loads or changes in subsoil conditions due to the heavy rains. Surface failures are therefore common, necessitating continual maintenance. As a result of these poor conditions, a fairly large proportion of the city engineer's budget is spent on maintenance and relatively little new road construction occurs.

2. Drainage. Poor drainage and the combined problems of poor sanitation and contamination of potable water supplies are among the more serious infrastructural problems Olongapo faces. Little control has been exercised in the past over development on and near drainage canals nor has there been ongoing maintenance of the system. As a result much of the

^{59/} These include a perimeter sea wall, landfill and drainage in the depressed barangays of Pag-asa, Banicain, and Kalaklan.

system is clogged and ineffectual and many low income areas lack drainage altogether.

To date there are no comprehensive plans for improvement and the city engineer's department lacks accurate surveys of the existing system. Prior to improvement, therefore the entire system will need resurveying. Clogged drainage canals will require dredging down to their original elevations. Where possible, squatters on the drainage system rights-of-way must be resettled. A gradual program should also be started to replace toilet facilities discharging directly into drainage canals. This program could build on the project already initiated by the city health department. Finally, reforestation and more stringent control of development in watershed areas should be intensified to alleviate the silting which now occurs.

Utilities

1. Water Supply. Due to the lack of maintenance since the waterworks was handed over to the city (1959) plus the rapid increases in population, much of the water distribution system requires replacement. Due to high leakage and low pressures, the service in many areas is poor and shallow wells are used. Thus, poor drainage coupled with poor sanitation increases the risk of contamination of potable water supplies and increase the dangers of water-borne disease.

Steps have been taken to improve the waterworks by forming an independent water district under the auspices of the Local Water Utilities Administration (LWUA). Since only about 35 percent of the system is metered, the new water district has embarked on a program to meter the entire system and improve its collections efficiency. Recognizing the poor condition of the present system, the district has been granted approval by LWUA for a loan and technical assistance to implement a 20-year capital improvement program for replacing most of the existing network, expanding the service area and changing the source of supply. However, it is facing opposition in increasing its rates to economic levels to cover the costs of developing the new system. As a result it is receiving subsidies from the city in terms of free power from the Public Utilities Department (PUB).

In the interim, while the new system is being developed, training in environmental sanitation could be given to low-income households in filtering and boiling water, better methods of waste disposal, and general hygiene. As is suggested in Volume III, small loans could be made for financing

connections to the water systems. The feasibility might also be studied of bulk purchasing potable water from the water district and selling it at low rates to households lacking access to the present distribution system. The latter proposal would be a temporary measure to replace water supplies from contaminated shallow wells until the water district's proposed program is complete.

2. Sewerage. Like other urban areas in the Philippines, Olongapo lacks a municipal sewerage system. Although city health inspectors do inspect the installation of private sanitary systems, they are unable to stop unsanitary practises. However, the public health office has made attempts to improve conditions by initiating a toilet construction campaign. Given the lack of capital, the campaign has been quite successful, constructing almost 300 new private facilities since 1977. Such initiatives should be given encouragement and be expanded into more comprehensive programs. Relatively small amounts could be loaned to households lacking sanitary provisions by the city at terms which would recoup the city's investment.

Alternative sewerage systems should be investigated and plans developed for eventual replacement of most of the private systems. Present regulations concerning subdivision development should be reviewed and provisions made so that future installation of sanitary sewerage systems can be made if they are not presently feasible.

3. Solid Waste Disposal. Solid waste collection has improved in Olongapo since the city health office took over management of the service. However, while the service is much more efficiently run and savings in operating costs of almost 50 percent have been achieved, the service needs upgrading. The present fleet of garbage trucks requires both replacement and expansion to service all areas of the city. As recognized by the city health officer in 1972, the present dumping site constitutes a severe environmental hazard and should be moved. Although a new sanitary landfill site has been chosen, it lacks an all-weather access road and is inaccessible by the present fleet of trucks.

The garbage collection service is entirely subsidized by the city budget as there are no collection fees. Since the service has no provisions for capital improvements, the proposal in Volume III to charge for garbage collection should be implemented as soon as possible. Service charges could be based on the type and intensity of use and revenues could be used to finance operating costs and initiate improvements. Commercial recycling of garbage should also be investigated as an additional source of funds for maintenance of the service and as a potential source of employment for scavengers.

4. Power Supply. The poor condition of most of the existing power distribution network and the past inefficient management of the Public Utilities Department combine to make the PUB a drain on the city's resources. In addition to the lack of financial resources, the lack of excess capacity is likely to constrain the city's development in the near future. Current demand is almost 90 percent of PUB's capacity. At current consumption rates, demand is expected to exceed capacity by 1980. However, due to amortization payments of previous debts, less than one percent of the PUB's FY1978 budget is devoted to capital improvements.

The public utilities engineer estimates that up to 80 percent of the present distribution system requires replacement. As a result of the poor condition of the system and the illegal practices, roughly 23 percent of the power supplied to the system is lost. While the system covers 100 percent of the city's built-up area, approximately 30 percent of the city's dwelling units are not connected to it. Furthermore, service to existing customers is uneven and frequent breakdowns occur.

Several measures could help in upgrading the system. First, the PUB should be established as a semi-autonomous city department fully in charge of its finances and operations. The newly structured department should be accountable to the mayor but should have its own budget, be in charge of both billing and collections and carefully police new connections. Attempts should be made to refinance the outstanding loan from the NPC at more liberal terms. Financial and technical assistance should also be sought to upgrade the existing system and provide for expansion. Finally, a gradual increase in rates should be initiated to increase the department's revenues and provide resources for future expansion.

3. Socio-Economic

Social

The establishment of health centers in low-income communities has not been sufficient to improve health care. While the number health facilities provided in Olongapo are equal to national averages they are poorly utilized. A survey conducted by the City Planning and Development Staff showed that most barangay residents were not aware of the services offered by the health centers in their areas. The health department estimated that only 47 percent of their target population utilizes the health services. Thus local educational campaign conducted at the grassroots level seems to be required.

As is the case in Angeles City, the local branch of the MSSD has difficulty in implementing the social service programs planned on the national level. Unemployment and underemployment are major problems, yet the social workers charged with implementing the Self Employment Assistance Program do not have the business background to efficiently manage the programs. It seems, therefore, that programs should be developed to upgrade local implementation capabilities and to gear programs to a level which can be implemented locally.

Economic

The economic structure of Olongapo is totally dependent on the U.S. Naval Base. Growth was brisk during the Viet-Nam war when the city was a rest and recuperation area for American troops in Southeast Asia. While entertainment remains the leading economic sector, the volume of business decreased by more than 60 percent between 1972 and 1976. In addition to dislocating entertainment workers, this has affected the other economic sectors in the city. Furthermore, there are no other industrial sectors sufficiently developed at present to absorb investment capital and displaced labor.

The city must therefore begin to expand its economic base and become more self reliant within the context of regional and national development plans particularly the Industrial Estate Development program and the Manila Bay Metropolitan Region Plan. As suggested in the 1978-2000 Framework Development Plan, attempts should be made at developing industrial programs, especially those with linkages to the mining and fishing sectors. Supply industries for the Kawasaki shipbuilding yard to be built in Subic might also be identified. This could be done by the CPDS in partnership with the Olongapo Chamber of Commerce. If feasible, the city could provide the land and infrastructure for a small industrial estate near the planned shipyard in Barrio Barreto. Formal and informal manpower training programs in the city could subsequently gear their curriculums to relevant industrial skills required by the new industries.

PERSONS INTERVIEWED IN MANILA

United States Agency for International Development
Peter Cody, Mission Director
Dennis Barrett, Deputy Mission Director
William Sommers, Chief, Provincial Development Office
William McDonald, Chief, Captial Development Division

National Environmental Protection Council
Amador Remigio, Officer-in-Charge

National Housing Authority
Col. A. Fernando, Corporate Secretary
Josie Ramos, Director, UNEP/NHA Marginal Settlements
Improvement Project

Ministry of Human Settlements
Jose Cabazar, Director of Special Programs

Local Water Utility Administration
Primitivo H. Alva, Manager, Technical Services
Department

Appendix 1

DEFINITIONS AND POPULATIONS OF URBAN AREAS 1/

The degree of urbanization of a nation is usually defined as the proportion of the population resident in urban places. The definition of what is urban in the Philippines, however, has changed over time. In the 1948 census the urban population included all persons living in poblaciones (central districts) of chartered cities and provincial capitals plus the population living in all poblaciones in all municipalities and municipal districts. This census definition embraced only a small portion of the population of certain cities, but it included the entire population in poblaciones, many nearly rural in character such as the barrios. In 1948 more than half of these poblaciones had fewer than 2,500 inhabitants.

The definition of urban areas was expanded in 1956 to include the entire areas of chartered cities and municipalities and to encompass the provincial capitals and metropolitan Manila. Metropolitan Manila included Manila City and its suburbs, i.e., the cities of Quezon, Pasay, and Caloocan and the municipalities of San Juan, Mandaluyong, Makati, and Paranaque.

To overcome the limitations of the earlier definitions which still classified as urban many populations living in quite rural conditions, the following criteria were established in 1963:

1. All municipal jurisdictions (whether or not designated as chartered cities or provincial capitals) were urban if they had a density of at least 1,000 persons per square kilometer; but the whole of Quezon, Baguio, and Cebu cities were included regardless of the minimum density rule.

2. For all other cities and municipalities with a density of at least 500 persons per square kilometer, only the poblacion (regardless of population size) plus any barrio having at least 2,500 inhabitants and any barrio contiguous to the poblacion with at least 1,000 inhabitants were regarded as urban.

60/ Much of the information in this appendix has been taken from Tito A. Mijares and Francisco V. Nazaret, The Growth of Urban Population in the Philippines and Its Perspectives, BCS Technical Paper No. 5 (Manila: Bureau of the Census and Statistics, n.d.). This was reprinted in the World Bank's report, The Philippines: Priorities and Prospects for Development, Basic Economic Report, Volume II, May 5, 1976.

3. For all other cities and municipalities with a population of at least 20,000 persons, only the poblacion (regardless of population size) and all barrios contiguous to the poblacion with at least 2,500 inhabitants were regarded as urban.

4. All other poblaciones with a population of at least 2,500 inhabitants were regarded as urban.

According to the above criteria, 1,559 places were classified as urban in 1960. Of these, 38 percent had populations of less than 2,500. Doubts were raised as to the suitability of minimum population and density criteria when so many places classified as urban were still small and primarily rural, and the density ratio was not employed for the barrios inasmuch as barrio boundaries were not known.

In 1970 the census definition of urban areas was again changed to include criteria related to the functions of urban centers, particularly their economic and social activities. It established the following criteria:

1. In their entirety, all cities and municipalities that had a population density of at least 1,000 persons per square kilometer.

2. Poblaciones or central districts of municipalities and cities that had a population density of at least 500 persons per square kilometer.

3. Poblaciones or central districts not included in the above, regardless of population size, that had the following features:

A street pattern with either a parallel or right angle orientation.

At least six establishments (commercial, manufacturing, recreational, and/or personal services).

At least three of the following:

A town hall or chapel where religious services were held at least once a month;

A public park, plaza, or cemetery;

A marketplace or building where trading activities were carried on at least once a week;

A public building such as a school, hospital, or health center.

Barrios having at least 1,000 inhabitants and meeting the conditions set forth in the above criteria and in which the occupation of the inhabitants was predominantly nonfarming or nonfishing were also included in the definition of urban areas.

The essential difference between the various definitions of urban areas is that the criteria of density, minimum size, and administrative center were used in the earlier censuses while in 1970 the density rule was combined with urban characteristics. ²/ If the 1960 definition is applied to the 1970 population, 2,349 areas would be included. The new definition included 246 more poblaciones and city districts than the old definition, although 189 more barrios were included under the old definition. This is because, as defined the new way, urban poblaciones and city districts included not only persons residing in a city, municipality, or municipal district with a population density of not less than 500, but also those living in places with urban characteristics irrespective of population size.

A. Definitions of Metropolitan Manila

The definitions that have been used over time to delimit the Manila Metropolitan Area have also varied greatly. This has occurred in part because different national agencies, such as those dealing with transportation, water supply, sewerage, and drainage have geared their definitions of the metropolitan area to their particular needs and the purpose of their studies. ³/ As a result, there are at least eight definitions of metropolitan Manila in use. In terms of population, land area, and number of overlapping jurisdictions, these definitions are quite different. The one which is most frequently used in this report is the 1970 Bureau of Census and Statistics' definition. It is the most rigorous definition and includes five chartered cities (Manila, Quezon, Caloocan, Pasay, and Cavite) and 23 municipalities selected according to the following criteria:

⁶¹/ Among these places, 1,164 had populations of less than 2,500 persons.

⁶²/ See, for example: Manila Bay Metropolitan Region Strategic Plan: Various Definitions of Metropolitan Manila Area, Planning and Project Development Office, Department of Public Works, Transportation, and Communications (Manila, Philippines: April 6, 1973), p. 1.

1. The city or municipality must be contiguous to Manila and suburbs or adjoining an intermediate city or municipality or qualifying population density (i.e., greater than 1,000 persons per square kilometer) and must show evidence of strong integration economically and socially with Manila and suburbs.

2. The city or municipality must be urban in its entirety in accordance with the Bureau of Census and Statistics definition of urban areas.

3. At least 75 percent of the labor force of the city or municipality must be engaged in nonagricultural occupations. 4/

63/ The 23 municipalities covered within this definition are: Makati, Mandaluyong, Navotas, San Juan, Malabon, Pasig, Marikina, Paranaque, Pateros, Cainta, Las Pinas, Muntinlupa, Taguig, Taytay, Bacoor, Kawit, Noveleta, Rosario, Meycauayan, Valenzuela, Binan, San Pedro, and Santa Rosa.

Appendix 2

TASK FORCE ON HUMAN SETTLEMENTS:
PRIORITY URBAN CENTERS

Metropolitan Centers

Cebu City
Davao City

Regional Centers

San Fernando, La Union
Tuguegarao, Cagayan
San Fernando, Pampanga
Legaspi City
Iloilo City
Tacloban City
Zamboanga City
Cagayan de Oro City

Subregional Centers

Baguio City
Angeles City
Olongapo City
Tarlac, Tarlac
San Jose City
San Pablo City
Butuan City
Iligan City
Batangas City
Lipa City
Bacolod City
Cadiz City
Mandaue City
Quezon, Bukidnon
Mati, Davao Oriental

Manila Bay Metropolitan Region Growth Poles

Balanga-Mariveles, Bataan
Baliwag, Bulacan
Infanta, Quezon
Lucena, Quezon
Silang, Cavite

SOURCE: Human Settlements: The Vision of a New Society, Volume 1, Task Force on Human Settlements.

Appendix 3

CITY TYPES AND CLASSIFICATIONS

See page 31 in Chapter I for the characteristics of types A, B, C, and D under the listing "regional development study criteria ranking urban growth centers."

	<u>Popu- lation</u>	<u>Land Area</u>	<u>Densifi- cation</u>	<u>Growth Rate</u>	<u>Average Revenue</u>
REGIONAL PRIMARY CITIES (TYPE I)					
Angeles City	A	D	B	B	B
Butuan City	A	B	A	A	B
Cagayan de Oro City	A	C	B	B	B
Cebu City	A	C	B	B	A
Davao City	A	A	B	B	A
Gen. Santos	B	A	B	B	B
Iligan City	A	B	B	B	B
Metropolitan Manila	A	D	C	C	A
Olongapo City	A	D	B	B	A
Zamboanga	A	A	B	B	A
SUBREGIONAL SECONDARY CITIES (TYPE II)					
Baguio City	B	D	C	C	A
Bacolod City	A	D	C	D	A
Batangas City	A	C	C	C	B
Cabanatuan City	A	D	C	C	C
Cadiz City	A	B	D	D	C
Calbayog City	A	A	C	D	C
Cotabato City	B	D	B	B	B
Dipolog City	C	D	B	B	C
Gingog City	B	C	C	C	C
Iloilo City	A	D	C	C	A
Lipa City	A	D	C	C	C
Ozamis City	B	D	B	B	C
Pagadian City	B	C	C	C	C
Palayan City	D	D	A	A	D
Puerto Princesa	C	A	C	B	C
San Pablo City	A	D	C	C	C
Tagbilaran City	C	D	B	B	C
TERTIARY CITIES (TYPE III)					
Bago City	B	C	C	D	C
Bais City	C	C	C	C	C
Canlaon City	C	D	D	C	D
Cavite City	B	D	C	C	C

	<u>Popu- lation</u>	<u>Land Area</u>	<u>Densifi- cation</u>	<u>Growth Rate</u>	<u>Average Revenue</u>
Dagupan City	B	D	C	C	C
Danao City	B	D	C	C	D
Dapitan City	C	D	C	C	D
Dumaguete City	B	D	C	C	C
Iriga City	B	D	D	D	C
La Carlota City	C	D	D	D	C
Laoag City	B	D	C	C	C
Lapu-Lapu City	B	D	C	C	C
Legaspi City	B	D	C	C	C
Lucena City	B	D	C	C	C
Mandaue City	B	D	C	C	C
Marawi City	B	D	C	C	D
Naga City	B	D	D	D	B
Ormoc City	B	C	D	D	C
Oroquieta City	C	D	C	C	D
Roxas City	B	D	C	C	C
San Carlos City (Pang.)	B	D	C	C	C
San Carlos City (NegOcc)	B	C	D	D	C
San Jose City	B	D	C	C	C
Silay City	A	D	D	D	C
Surigao City	B	D	C	C	C
Tacloban City	B	D	D	D	B
Tagaytay City	D	D	C	C	D
Tungub City	C	D	B	B	D
Toledo City	B	D	D	D	A
Trece Martires	D	D	B	B	D

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