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COOPERATIVE AGREEMENT ON HUMAN SETTLEMENTS AND NATURAL RESOURCE SYSTEMS ANALYSIS

Evaluation Report

RURAL GROWTH AND SERVICE CENTERS: THE HOUSING COMPONENT

by

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PROJECT URBE EVALUATION

The Housing Component

EXECUTIVE SUMMARY

The Project URBE housing component has been completely redesigned in 1982 to correspond with a change in policy at the Ministry of Housing. Where the bulk of housing investment had been allocated to completed units in consolidated projects (1978 design), it was now to be reassigned to home improvement loans on scatered individual lots (1982 revision). See documentation in Tables 7 and 14.

The expanded 1982 program substitutes 3,400 solutions for the original 2,186 by reducing the average cost per solution, increasing the number of home improvement loans (from 200 to 2,400), and reducing the number of finished housing units (from 1,166 to 398).

There has been general failure to adjust project design, applicant selection, services provided, collection procedures, and administrative routines to the new design.

This has introduced a wide range of problems:

1. Of all solutions (homes and loans) thus far provided under Project URBE, 41% have gone to households whose incomes are above the maximum permitted for eligibility ($330 per month in 1983). See Table 15.

2. All site-and-services loans, some of the housing projects, and an unknown proportion of the home improvement loans are destined for households with inadequate sanitation provisions.

3. In the one major URBE project completed, Loma Colorada, collections are one-third less than scheduled payments for 1982. Since this project has the smallest amortization payments ($10-12 per month) in the program, cost recovery is emerging as a major issue.

4. Information loss within the existing system, and failure to utilize information available, are partly responsible for failure to reach lowest income groups with solutions, provision of assistance to middle income households who are ineligible, and deficient collections.

   Since the home improvement loan program serves a great many more applicants with much smaller amounts of financing, the information processing problem will accelerate rapidly.

The decision to concentrate on home improvement loans to the exclusion of housing projects cuts a substantial proportion of middle income households out of the housing market completely. There are no private sector alternatives for households earning between $300 and $600 per month in the URBE communities.

The Home Improvement Loan Program requires the Ministry of Housing to assume a comprehensive role in the planning, processing and provision of assistance to applicant households. Both the private sector building supply firms and construction businesses are eliminated from participation. The Ministry has probably become the largest dealer in building materials in the country. The opportunity to stimulate local business activities and provide employment through the private sector has been neglected.

In the City of David, through expenditures scheduled for 1982, 516 home improvement loans are budgeted for $928,000 in construction materials. If this sum were provided in cash, a substantial impact on local business would result. Needless to say, the administrative burden on the Ministry of Housing would also be reduced.

Finally, the home improvement loan program transfers responsibility for both construction and payment from the group to the individual recipient. Since no labor costs are included, this makes each household responsible for its own construction program. Labor must be either purchased or provided as a spare time activity by household members. Should they fail to do this, materials will deteriorate and be wasted.

It was the previous practise of MIVI to deal with groups in negotiating housing projects. Members were able to organize for contributions of labor, cash or materials. Furthermore, when a project was completed, groups could be made responsible for the payments of their members. The home improvement loan program destroys this framework for both implementation and accountability.

The following issues emerged as needing immediate solutions:

1. The question of eligibility, raised by the present income ceiling of $330 per month, opens up the more important issue of choice of target groups for specific solutions.

2. The related question of affordability, raised by existing problems with collections, opens up the broader issue of the utility of home improvement loans as an "all-purpose solution" to URBE community housing problems. Obviously, there are customers for a much wider range of services than are presently being provided.

3. Then there is the derivative from 1 and 2 above: since neither eligibility nor affordability have been taken into account in planning the home improvement loan program, we have 2,400 solutions seeking problem households, rather than 2,400 households with a housing problem seeking appropriate solutions. The system runs backwards.

4. The underlying problem from which questions of affordability, eligibility, project design and cost recovery emerge is that of pervasive deficiencies in collecting and processing information.

The evaluation team perceives that the solutions to these problems will require at least the following:

1. Establishment of an information system incorporating many of the recommendations prepared by E. S. Popko in his consultant report entitled, "A Framework for Management Information Systems at the Ministry of Housing, Panama."

   Our major difference is that he believes the system can be developed internally through utilization of existing MIVI staff. We believe that it must be prepared and installed under contract with a management systems group who will indoctrinate MIVI personnel at all levels in its multiple uses.

2. A household level socioeconomic survey is needed in each URBE community to determine income levels, housing needs, household budgets, affordability issues, and housing demand. When survey results are compared with MIVI's applications file, it becomes possible to determine who is being served, where demand is concentrated, and which types of households are most in need. The degree to which services provided can become self-sustaining will also be apparent. In short, key data required for planning, administration and evaluation will be at hand.

3. A special study of home improvement financing on a cash basis is needed. To be comprehensive, it should include the site-and-services option in addition to the home improvement loans. If properly packaged, the combinations of lots-plus-loans would satisfy the evaluation team's concerns regarding minimum services, sanitation, private sector purchasing, cash available for labor procurement, and provision of solutions for all income levels.

The reprogramming of the URBE Project housing budget from housing projects to home improvement loans is an innovative step. The recommendations made by the URBE evaluation team are intended to implement the revised scheme by dealing with some of its unintended and unexpected consequences.

A final issue raised by the USAID Regional Housing Office concerns administrative costs within the Ministry of Housing. USAID suspects, and the present study confirms, that the costs of the home improvement loan program will be greater than those of previous solutions. Installation of a management information system is the key to more effective cost accounting within the Ministry.

The aim of this study is to generate interest and offer suggestions toward the dual objectives of (1) delivering a more effective housing solution to the residents of the URBE communities, and (2) effecting administrative improvements within the Ministry of Housing which will expedite delivery.

Overview of Project URBE

The URBE Concept

On August 3, 1983, a $10 million loan agreement was concluded between the United States and the Government of Panama. The agreement included an additional authorization for $5.4 million of Housing Investment Guaranty (HIG) funding which brought the amount of the package up to $15.4 million. Counterpart funding from the Government of Panama raised the total amount to $28.5 million for a period of five years.

The program included a family of components, each of which was to be supported by a portion of the loan, as follows:

Small Businesses and Industries	$ 3,000,000
Agro-Industry Projects	3,200,000
Transport Terminals	2,500,000
Housing	5,400,000
Technical Assistance	1,300,000
TOTAL	$ 15,400,000

The project, designated "Rural Growth and Service Centers" by USAID, became better known by its Spanish acronym, which was contracted from Proyecto de Desarrollo de Sistemas Urbanos Integrados to "Proyecto URBE."

The overall objective of Project URBE was to provide a comprehensive regional development plan to western Panama in order to integrate that region more directly into the urban industrial, modern life of the nation. Project developers felt that a well-articulated, cooperative effort organized under the Ministerio de Planificación y Política Económica (Ministry of Planning and Economic Policy or MIPPE) would be the best method by which a comprehensive development program could be carried out in the western region.

The general concepts under which the program operated drew heavily on growth pole and central placement theory in geography. Rank-size distributions of a nation's cities would indicate those which needed their urban infrastructure enhanced in order to grow. Through the growth of smaller towns and cities, the distribution of people and wealth in the nation would be "rationalized." Project URBE was to affect six provinces in western Panama: Cocle, Veraguas, Herrera, Los Santos, and Chiriqui.

By seeing to it that the various ministries --those responsible for housing, sewers, electricity, water, transportation, etc.-- worked together, a program would be created in which multiplier effects would expand the overall impact of individual projects in each area. It was estimated that these multiplier effects, along with the direct effects, would in the end create between 2,700 and 3,500 jobs for the urban poor and migrants to the cities of western Panama. We have, however, found no evidence to indicate whether these expectations have been realized. No effort seems to have been made even to determine a method for estimating numbers of jobs created.

The housing component of Project URBE was to be carried out by Panama's Ministry of Housing (Ministerio de la Vivienda, commonly referred to as MIVI). The Ministry was chartered in 1973 to provide comprehensive planning for housing and urban growth in Panama. It has since been active in developing housing solutions in and around Panama City and in the Canal Zone generally. In the past it has worked under HIG loans 525-HG-008 and 009 to provide urban renewal in the center of Panama City and home improvement loans and various types of housing solutions in Nuevo Chorrillo and other locations in and around Panama City. Until the inception of Project URBE, however, the Ministry's activities in the rural areas of Panama were restricted because of the heavy concentration of investment and interests in the Canal Zone.

The URBE Housing Component

I. Introduction

Each component of Project URBE was designated to make simultaneous advances along three dimensions of regional development:

1. Fulfill a basic need within the region by providing an appropriate service financed by the loan.

2. Build a government institution with the capability to continue to meet that need by providing services beyond the term of the loan.

3. Multiply the effectiveness of both services and institutions by constructing linkages between each.

This section considers the shelter requirements of the project area as the basic need, and describes the housing solutions provided by the appropriate government institution: The Ministry of Housing (Ministerio de Vivienda, or MIVI).

II. The URBE Housing Component, 1978

A. The Basic Need: Shelter Solutions in Secondary Cities

The Project Paper (BAS-002: iii) observes that, "housing... is needed to help increase the attractiveness of the growth and service centers as places to live and work and to help insure the local availability of entrepreneurial, managerial and technical personnel essential to the growth of the two regions." And further (BAS-002: 36):

> "Taken together, the shelter solutions envisioned... will serve the housing needs of families with a broad range of incomes. Of a total 2,186 solutions, approximately 25% will be affordable by families in each of the three deciles between the 10th and 39th percentiles of the income distribution pattern for the centers. Approximately 25% of the URBE Project shelter solutions have been allocated to families with incomes between the 40th and 49th percentiles because (a) it is important to the development of the centers to hold a variety of middle management and professional employees, technicians and skilled workers; (b) relatively little housing has been built in the centers for such families; and (c) the target population for HIG lending includes all families below the median income level."

The basic issue from which these concerns originate was demographic in nature. While all provinces in the URBE region increased in population between 1960-1970, the province with the maximum gain (Cocle with 26.7%) grew less than half as fast as Panama (54.8%). It was concluded that the entire region was losing migrants to Panama, and that the loss was probably selective, i.e., made up primarily of the skilled and the educated.

B. The Solution Intended: Project URBE Housing Program

Beginning in the 1960's, USAID adapted the Housing Guaranty Program as its principal instrument for addressing shelter problems. It is a mechanism for channeling funds from the U.S. private sector to provide long term financing for low income shelter and urban upgrading programs in developing countries. The loans are guaranteed by the U.S. government to protect lenders against loss. Since its inception (to 1981) more than $1.5 billion in Housing Guaranty loans were authorized in 42 countries. Since 1975, these funds have been used exclusively for lower income households (those receiving less than the median household income in their community).

The original URBE Project budget was prepared to include $5.4 million in Housing Investment Guaranty (HIG) support, to be supplemented with a counterpart of $900,000 from the GOP.

Eight intermediate cities and service centers located throughout western Panama were chosen as sities for housing projects funded through URBE. Cities were chosen because of their importance to the area in which they were located and because of an assumed need to increase available services within them in order to keep people in the area from moving into Panama City. The cities and the number of housing solutions to be provided in each are as follows:

TABLE 1

Original Distribution of Housing Solutions: 1978

Cities	Solutions
David	650
Concepcion	50
Puerto Armuelles	50
Santiago	405
Chitre-Los Santos	466
Las Tablas	115
Aguadulce	250
Penonome	200
Total	2,186

Source: BAS-002:35-36.

The Ministry of Housing in its previous projects had developed six types of housing solutions in various price ranges. These were adopted for use in URBE with litte modification. Within MIVI these solutions have become known as URBE 1, URBE 2, URBE 3, URBE 4, URBE 5, and URBE 6:

URBE 1, Serviced Sites: Lots of 300 square meters or less with water connections to be available at property line facing a gravel road.

URBE 2, Home Improvement Loans/Core Units: Loans to those who own land but need help to complete or upgrade their home. Core units 36 meters square, with concrete floor, sheet metal roof, and concrete block walls would be available to people living in squatter settlements.

URBE 3, Urbanized Lots: Lots of 300 square meters or less with water, sewer, and electricity available at the property line.

URBE 4, Units on Serviced Land Owned by Beneficiaries: Units 45 meters square with two bedrooms, living-dining room, and kitchen.

URBE 5, Units with Water and Latrine: Units 45 meters square with two bedrooms, living-dining room, kitchen, and latrine on a lot no larger that 300 square meters.

URBE 6, Complete Two-Bedroom Units on Urbanized Lot: Units 45 meters square with two bedrooms, living-dining room, kitchen and water closet on lots, 300 square meters or less and serviced with electricity, water, sewer system, and road.

The number and estimated unit cost of each type of solution were to be as follows:

TABLE 2

Housing Solutions by Type and Cost: URBE, 1978

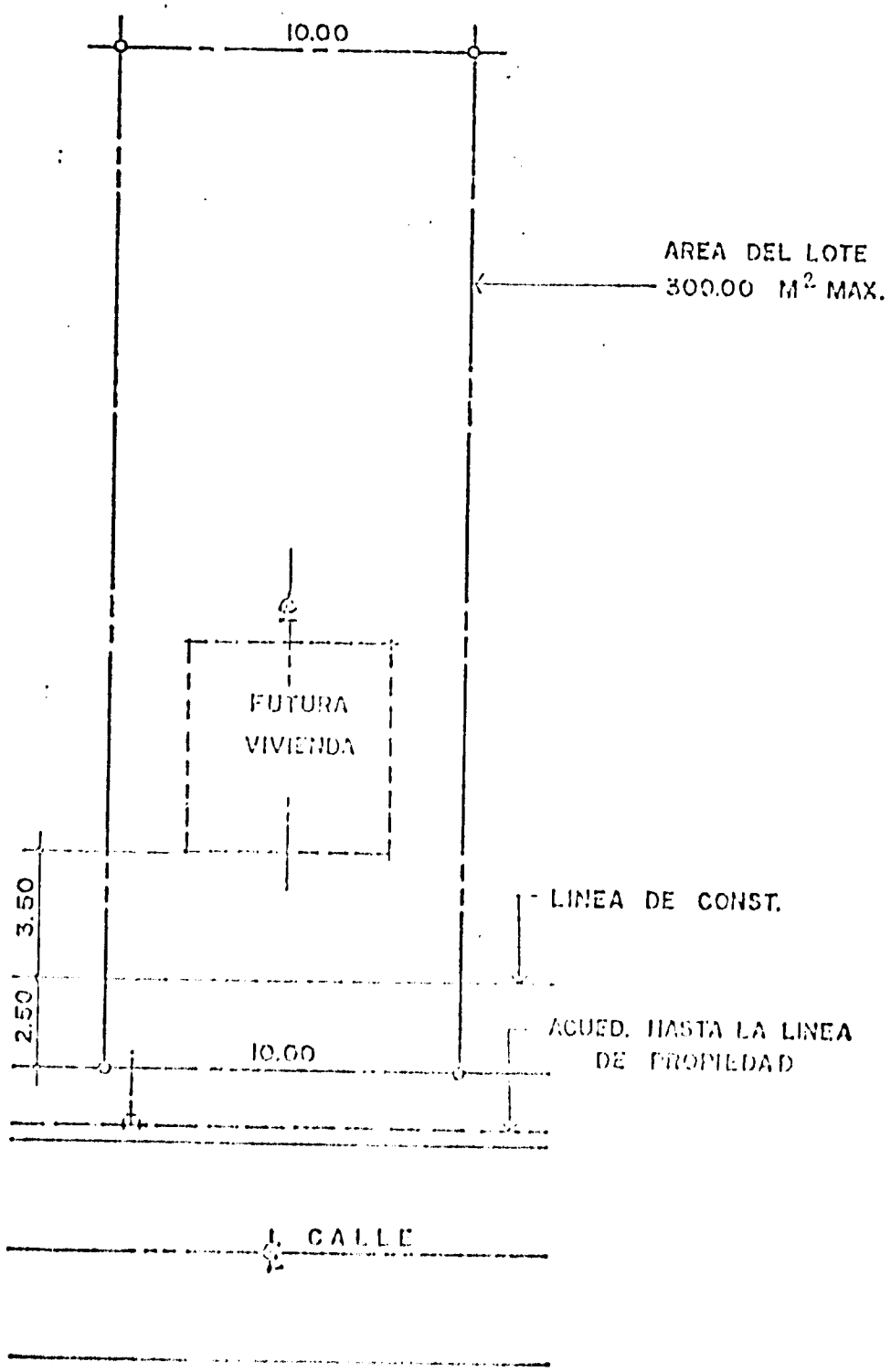
Solution Type	Unit Cost	Number	Total Cost
URBE No.1	500	400	$ 220,000
URBE No.2	1,000	200	200,000
URBE No.3	1,500 - 1,650	420	685,000
URBE No.4	2,000	95	190,000
URBE No.5	3,000 - 3,200	335	1,046,000
URBE No.6	4,700 - 5,700	736	3,870,200

Source: BAS-002: pp. 35-36

Each type of solution is illustrated in the diagrams, prepared by the Ministry of Housing, which appear on the following pages as URBE 1-6.

URBE 1

LOTE CON ACUED. Y CORTE DE CALLES



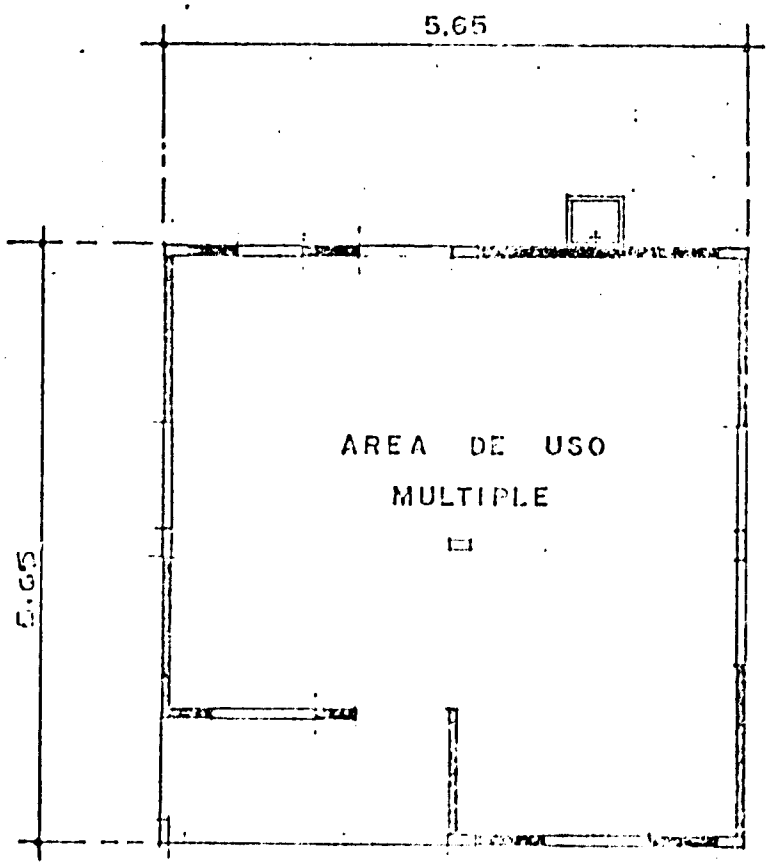
LOTE TIPICO

URBE 2 PRESTAMO PARA TERMINAR LA VIVIEN

FINANCIAMIENTO HASTA POR LA SUMA DE B/.1,502.31 INCLUYENDO EL COSTO DEL TERRENO SI ES NECESARIO

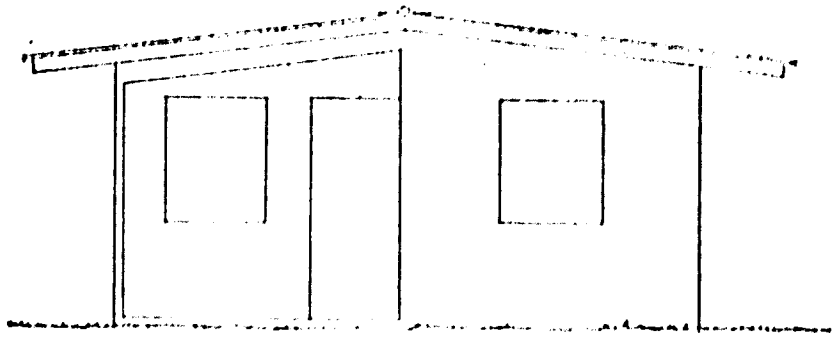
URBE 3

VIVIENDA CON AREA DE USO MULTIPLE.



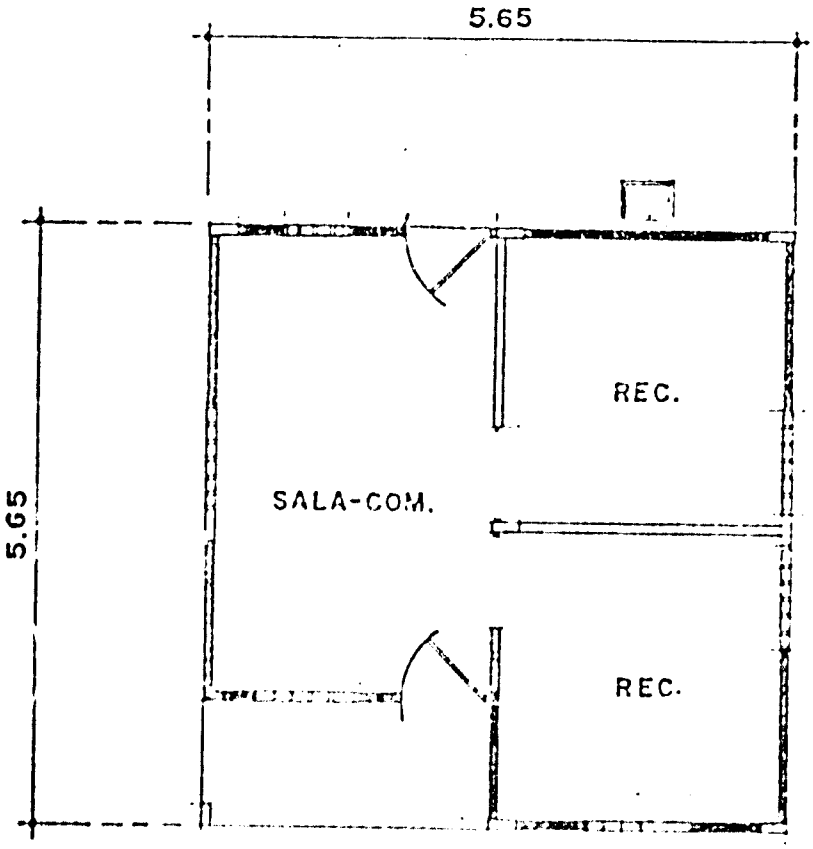
PLANTA

AREA TOTAL DE CONST. = 32.00 M²



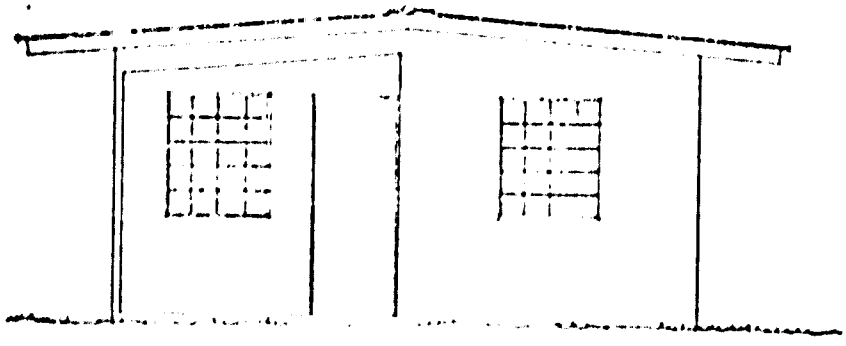
ELEVACION

URBE 4 VIVIENDA DE 2 REC CON ACUED. Y LETR



PLANTA

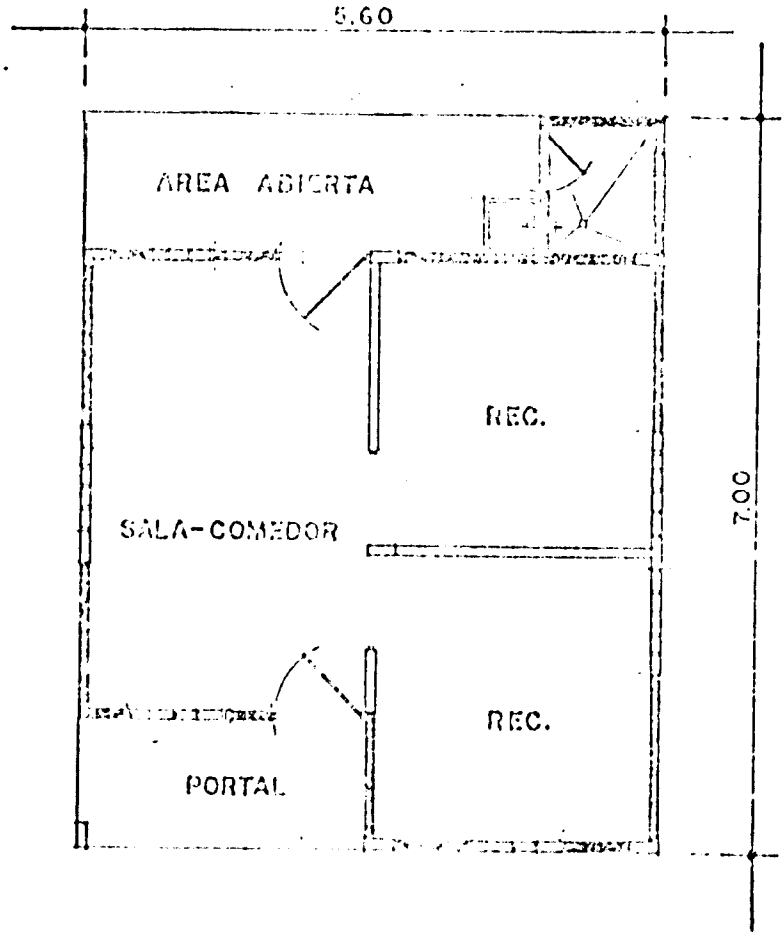
AREA TOTAL DE CONST. = 32.0 M^2



ELEVACION

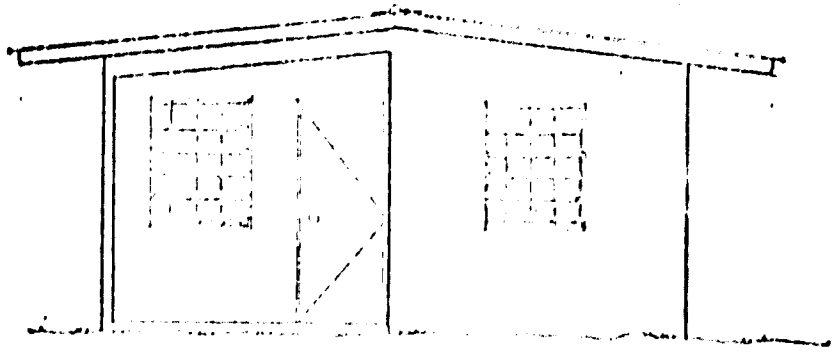
URBE 5

VIVIENDA DE 2 REC. CON ACUE. Y LET.-BAÑ



PLANTA

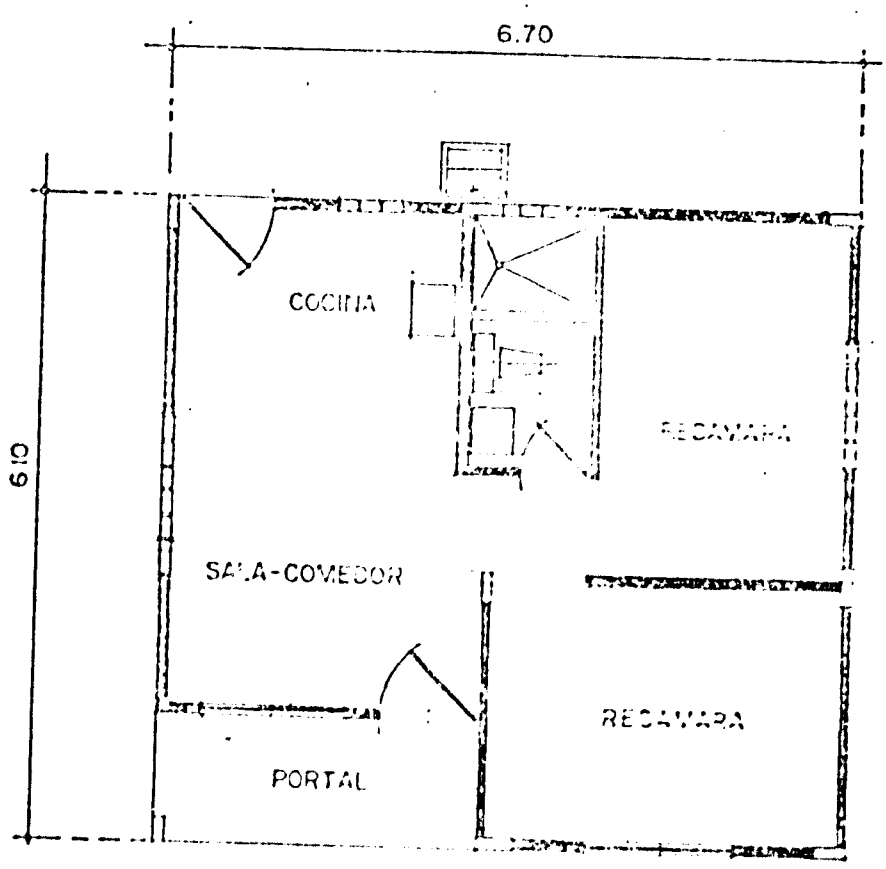
AREA TOTAL DE CONST. = 39.20 M^2



ELEVACION

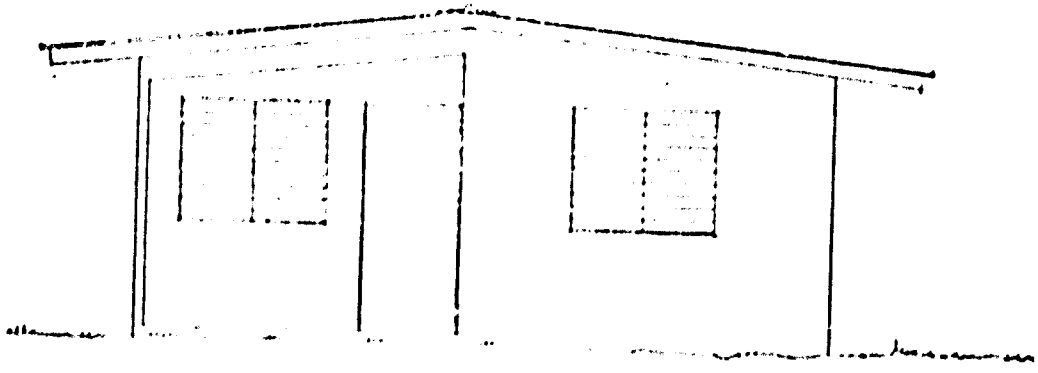
URBE 6

VIVIENDA DE 2 R
CON URBANIZACIO



PLANTA

AREA TOTAL DE CONST. = 40.87 M²



ELEVACION

Each growth and service center designated as part of the URBE program was to receive a mix of solutions appropriate to the assumed housing needs of its population. The anticipated distribution was as follows:

TABLE 3

Type of Solution Proposed by Location: 1978

City	Solution	Number	
David	URBE 1	250	
	URBE 2	100	
	URBE 6	300	
			650
Concepcion	URBE 5	50	
			50
Puerto Armuelles	URBE 6	50	
			50
Santiago	URBE 1	150	
	URBE 2	100	
	URBE 3	50	
	URBE 5	105	
			405
Chitre-Los Santos	URBE 3	120	
	URBE 4	60	
	URBE 6	286	
			466
Las Tablas	URBE 4	35	
	URBE 5	80	
			115
Aguadulce	URBE 3	100	
	URBE 5	50	
	URBE 6	100	
			250
Penonome	URBE 3	150	
	URBE 5	50	
			200
	Total		2,186

Source: BAS-00 Annex II-1: 3-4

The URBE housing component was intended to match solutions, priced at different levels, with the pre-determined distribution of incomes with which this chapter began, i.e., approximately 25% were to be received by each of the four deciles between the first and fifth (10-19, 20-29, 30-39, 40-49). This allocation is presented in Table 5 opposite which distributes solutions and income levels by community.

To implement this plan, specific data must be utilized with reference to the distribution of incomes in the URBE Project area, the proportion of incomes available for house payments, and the actual monthly payments to be scheduled. All these variables have a bearing on the important question of affordability: what is the absorptive capacity for housing costs in households at different levels of income?

TABLE 4

Affordability Analysis

Income Ranges in Percentiles	Monthly Household Income, 1979 1/	Percent of Income for Shelter 2/	Payment Range Proposed 3/
10 - 19 15th	$ 124	7-15%	$ 9-19
20 - 29 25th	164	10-18	16-30
30 - 39 35th	204	18-21	37-43
40 - 49 45th	237	20-25	47-59
Median	259	-	-

Sources: 1/ Implementation Agreement, November 27, 1979, Annex "D";
2/ BAS-002: Annex II-I: 23
3/ Col. 3 multiplied by Col. 2

The income distribution utilized above is based on a 1975 national sample survey of six thousand households. Data were disaggregated to the regional level and were further separated into urban and rural household income figures. There is some discussion of this survey in Thomas Eighmy, Mapping the Poverty Line in Western Panama, Checchi and Company, December, 1977 (pp. 4-5, 34-36).

These survey data, incremented by a an annual inflation rate of 6%, find their way into many URBE Project estimates. Table 6 provides income distribution data for all classes of communities in Panama from this same source. These figures are to be adjusted every six months following the date of the Implementation Agreement (November 27, 1979), "on the basis of income

distribution variations determined by a formula agreed upon between borrower and AID."

TABLE 5

Distribution of Housing Solutions
by Type, Income Level of Recipient Household, and Community
as Proposed in URBE Project Plan, 1978*

Decile of Household Income	10-20	20-30	30-40	40-50
David	250(1)	100(2)		300(6)
Santiago	150(1) 100(2) 50(3)	105(5)		
Chitre-Los Santos		60(4) 120(3)	100(6) 30(6) 50(6)	106(6)
Puerto Armuelles				50(6)
Concepcion				50(5)
Aguadulce	100(3)	50(5)	100(6)	
Penonome			150(3)	50(5)
Las Tablas		20(4) 15(4)	50(5) 30(5)	
Total Solutions	650	470	510	556
%	30	22	23	25
Budget Allocation	$560,000	$984,000	$1,893,000	$2,774,200
%	9	16	31	45
Cost per Solution	$862	$2,094	$3,712	$4,989

* Number in parenthesis refers to specific housing solutions (URBE 1-6), illustrated above.

Source: BAS-002, Annex II-I: p. 25.

TABLE 6

Program Beneficiary Eligibility

As of 1/1/79

Location, Income Group & Percentile		Monthly Family Income (MFI)	Percent of Income for Payment (PIP)	Maximum Allowable Payments (MAP)	Maximum Mortage Amount (MMA)	Maximum Sales Price 5% Down (MSP-5)	Maximum Sales Price 10% Down (MSP-10)
Panama City (25 year terms)							
	5th	77	9	7	642	676	713
Group A	15th	218	18	39	3577	3765	3974
	25th	289	20	58	5319	5599	5910
Group B	35th	360	22	79	7245	7626	8050
Group C	45th	419	23	98	8988	9461	9986
	Median	457	24	110	10088	10619	11209
Colon (25 year terms)							
	5th	73	8	6	550	579	611
Group A	15th	207	17	36	3302	3476	3668
	25th	275	20	54	4952	5213	5503
Group B	35th	342	22	74	6787	7144	7541
Group C	45th	398	23	91	8346	8785	9273
	Median	434	24	102	9355	9847	10394
Other Urban Centers (25 year terms)							
	5th	43	5	2	183	193	204
Group A	15th	124	15	18	1651	1738	1834
	25th	164	17	28	2568	2703	2853
Group B	35th	204	19	39	3577	3765	3974
Group C	45th	237	21	49	4494	4730	4993
	Median	259	22	56	5136	5406	5707
Rural Towns (20 years terms)							
	5th	20	-	-	-	-	-
Group A	15th	56	9	5	440	463	489
	25th	77	12	9	792	834	880
Group B	35th	93	14	13	1144	1204	1271
Group C	45th	113	16	18	1584	1667	1760
	Median	123	17	21	1848	1945	2054

1. Monthly Family Income (MFI) as of January 1, 1979.
2. Percent of Income for Payment (PIP) estimated average payment capacity for family of five.
3. Maximum Allowance Payment (MAP) results from applying PIP to MFI rounded to even one dollar.
4. Maximum Mortagee Amount (MMA) is based on a 12.5% annual interest rate with 25 year term for Urban Areas and 20 year terms for Rural Areas.
5. & 6. Maximum Sales Prices (MSP) resulting from adding Indicated Down Payment Percentage to Maximum Mortagee Amount (MMA).

TABLE 6

Program Beneficiary Eligibility

As of 1/1/79

Location, Income Group & Percentile		Monthly Family Income (MFI)	Percent of Income for Payment (PIP)	Maximum Allowable Payments (MAP)	Maximum Loan Amounts 5 Year Terms (MIA)	7.5 Year Terms (MIA-7.5)	10 Years Terms (MIA-10)
Panama City							
	5th	77	9	7	311	407	478
Group A	15th	218	10	22	978	1281	1503
	25th	289	10	29	1289	1688	1981
Group B	35th	360	10	36	1600	2096	2459
Group C	45th	419	10	42	1867	2445	2369
	Median	457	10	46	2045	2678	3143
Colon							
	5th	73	8	6	267	349	410
Group A	15th	207	10	21	933	1223	1435
	25th	275	10	28	1245	1630	1913
Group B	35th	342	10	34	1511	1980	2323
Group C	45th	373	10	40	1778	2329	2733
	Median	434	10	43	1911	2504	2938
Other Urban Centers							
	5th	43	5	2	89	116	137
Group A	15th	124	10	12	533	699	820
	25th	164	10	16	711	932	1093
Group B	35th	204	10	20	889	1164	1366
Group C	45th	237	10	24	1067	1397	1640
	Median	259	10	26	1156	1514	1776
Rural Towns							
	5th	20	-	-	-	-	-
Group A	15th	56	9	5	222	291	342
	25th	77	10	8	356	466	546
Group B	35th	93	10	9	400	524	615
Group C	45th	113	10	11	489	640	751
	Median	123	10	12	533	699	820

1. Percent of Income for Payment (PIP) is estimated average payment capacity for family of five.
2. Maximum Loan Amount (MIA) is based on a 12.5% annual interest with 5 year terms, 7.5 year jterms and 10 year terms.

The intended weighting of the project in the direction of those households with incomes closest to the median is evident from the data at the bottom of Table 5. Households in the 5th decile (40-50th percentile) receive six times the investment per solution provided to households in the 2nd decile (10-20th percentile). Table 4 indicates that payments are scaled proportionately.

The affordability data (Table 4) are undocumented. No reason is provided to explain why persons presently paying little or nothing for housing would accept solutions which require them to forfeit one-tenth to one-fourth of their gross income. The feasibility of this assumption, like most others in the housing components design, appears to rest on the previous experience of the Ministry of Planning.

C. Institution Building Proposed

The Ministry of Housing was created in January, 1973. Three of its branches are located in URBE growth and service centers (David, Chitre and Santiago) and there is a sub-branch in Penonome. Aimed at maximizing shelter to low income families, the Ministry was providing four types of solutions in 1978: (1) serviced lots with core units; (2) completed single-family units; (3) multifamily units; (4) community up-grading.

Ministry of Housing experience with Housing Investment Guaranty lending dates from 1976 when a $3.4 million agreement was completed for the Nuevo Chorrillo development in Panama. Next, in September, 1977, the Ministry negotiated a $15 million program intended to provide a range of services to the residents of San Miguelito, a suburb of Panama which received the bulk of rural-to-urban migrants flooding the city during the previous decade. Ten different types of housing solutions were provided and these became the antecedents of URBE 1-6, pictured above. From 1975, the Ministry was responsible for the construction of almost 12,000 shelter solutions in 25 project areas. Between 1976-1978, MIVI also completed small-scale projects in five of the eight growth and service centers.

A second responsiblity of the Ministry of Housing is physical planning of Panama's towns and cities. In a cooperative effort with the Ministry of Planning and Economic Policy, MIVI was to prepare designs for specific sites within URBE cities which were to receive public investment. The sites were to include those on which future housing projects would be constructed. The Housing Ministry's responsibility also included development of zoning regulations and related norms intended for the enforcement of the various elements of the town plans.

Despite its outstanding production record, the Project Paper (BAS-002: 69) identifies a range of management and administrative problems within MIVI which remain to be resolved. Basically, these appear to originate from rapid growth without an opportunity to consolidate gains and introduce routines recording transactions, monitoring construction, processing accounts, estimating costs and the like.

A number of the problems were located within its sister institution, the National Mortgage Bank (Banco Hipotecario Nacional). The BHN was to serve as

the borrower of Housing Investment Guaranty funds for MIVI. As administrator, furthermore, it was to be responsible for collection of monthly payments from borrowers. As in the case of MIVI, previous USAID studies noted organizational weaknesses within BHN, primarily in the areas of accounting, auditing and financial management.

The ills of MIVI and BHN were to be cured with a massive dose of technical assistance for which the budget was $424,000 (approximately one-third of all technical assistance provided under the URBE Project). Specific issues addressed began with that which was considered most important: construction of an information system:

> "MIVI has need... to develop better housing and urban development information systems to guide its leadership in making informed policy decisions... Technical assistance for a housing and urban development information system will consist of an assessment of available information as compared with MIVI's needs; advice on the organization and operation of the system; training for MIVI information system staff" (BAS-002: 69-70).

The priorities identified and amounts budgeted for institution building within MIVI included the following:

1.	Housing and urban development information system	$ 105,000
2.	Assistance with the organization of an urban planning staff	84,000
3.	Improvement of site planning capability	84,000
4.	Establishing an environmental protection capability	14,000
5.	Developing an internal auditing capability within BHN	28,000
6.	Strengthen BHN's financial management capability by establishing a financial accounting system	84,000
		$ 424,000

To execute the technical assistance projects envisioned, the prescription includes only man-months of consulting (59 in all for the six projects designated above). No alternative types of operational units or training functions appear to have been considered.

D. Linkages Proposed between Components

The interinstitutional relationships proposed for the Housing Ministry were primarily with the Ministry of Planning and Economic Policy (Ministerio

de Planificación y Política Económica, or MIPPE). The interaction was in the area of planning rather than housing. A town plan was to be prepared by MIPPE as a guide to the development of each growth and service center. Within the guide plan, norms and specifications for construction projects were to be prepared by MIVI. The physical plans from MIVI were to be coordinated with the guide plans from MIPPE at the community level.

Local participation was to be achieved by "reactiviation of the now largely dormant Planning Juntas" (BAS-002: 22). These groups were to review both the physical plan and the town plan, and make recommendations for revision. When satisfied with their contents, the Planning Juntas were to recommend the plans to the Municipal Councils for adoption as law.

On the housing side, it was expected by project designers that MIVI would relate to local contractors and construction firms. It was intended that designs for housing projects, once completed, would be put out for bids to contractors in the growth and service centers. Having acquired the experience, and learning that such undertaking would yield a substantial profit, it was expected that the private sector would proceed to initiate further home construction independent of government intervention. Lending for this purpose was to be made available through the government's housing finance system.

III. The Evaluation Strategy

The evaluation strategy to be employed in the study of the housing component was shaped by limitations presented by the state of the project itself, and the failure to anticipate evaluation requirements in the process of implementation. These limitations have been fully discussed in the document entitled "Interim Report and Work Plan for the URBE Evaluation" (R.A. Hackenberg, February 3, 1983), which is an appendix to the present report.

The major limitation encountered was the lack of progress reports, records or working documents in either USAID or GOP ministries. While, at first, this appeared to be the result of neglect or inadequate coordination, the root of the problem emerged at a deeper level. Information reporting procedures and record keeping proved to be inadequate to the task of keeping management in touch with the status of each component of the housing program sponsored by Project URBE.

As mentioned in the memorandum of February 3 concerning the work plan, the evaluation methods to be employed consisted of the following:

1. Inspection of official and unofficial records.

2. Interviews with both officials responsible for the program in MIVI and USAID, and also with field personnel and recipients of loans.

3. Informal surveys of the projects themselves, to consist of field visits and on-site discussion with contractors, beneficiaries and MIVI personnel.

A brief review of the results of each of these information-gathering procedures will complete this section.

A. Record Sources

The record sources consulted which proved to be of value included the following:

1. URBE Project - Shelter Component. Annex II, Section "I" to the Project Paper, "Rural Growth and Service Centers," AID/BAS-002. June 9, 1978.

   This document contains the design for the overall shelter component. It gives statistics on solutions by type and community, and by income level of intended recipient. It includes a section on affordability, cost recovery and financial details.

2. Implementation Agreement between the Republic of Panama, Banco Hipotecario Nacional and the United States for Shelter and Community Upgrading for Low Income Families in Growth and Service Centers. Project No.525-HG-010. November 29, 1979.

   This document contains the interpretive notes to accompany No.1 above. It has the income data used to compute the percentile categories of beneficiaries and plans for periodic revision of this eligibility criterion.

3. Amendment No.1, Implementation Agreement (as described in No.2 above) August 25, 1981.

   This amendment describes a "Paying and Transfer Agency Agreement" between GOP and The Riggs National Bank of Washington, D.C., making $12 million available at a variable interest rate.

4. Documentos de Factibilidad y Ejecucion, (also known as "anteproyectos") for the following housing projects sponsored by HG-010.

   A. Proyecto Loma Colorada, David. 1980.
   B. Proyecto Juan XXIII, Santiago. 1982.
   C. Proyecto Mi Dulce Hogar, Concepcion. 1982.
   D. Proyecto Paraiso, David. 1982.

   These preliminary documents for each project include socioeconomic data on household income of the applicants, relationship of costs of solutions to applicant's incomes, site map, community facilities and cost and construction data on each solution proposed.

5. Sub-Program de Mejoramiento Habitacional. Programa MIVI-AID, Prestamo 525-HG-010, Prestamo 525-HG-011. Documento de Implementacion. December 23, 1982.

This well-organized and effectively presented proposal argue for the substitution of a home improvement loan program for the balance of the house construction originally intended under the URBE Project. It proposes to construct 1,001 housing solutions at a cost to USAID-URBE of $1,943,700. Of these, 717 were already completed or well advanced at the date of release. It then outlines the expenditure of the URBE balance ($3,456,300) for 2,400 home improvement loans at an average cost of $1,800. This represents a major alteration in the Project URBE housing component design.

6. Proyectos Financiar con el Préstamo 525-HG-010 (URBE). n. d. Ministry of Housing.

   This is the progress report prepared by MIVI for 1982. It provides year end data on the status of all projects for which Project URBE funds are being utilized.

7. Memorandum: Status of HG-010/011 Construction Activities. Earl Kessler to Mario Pita. Regional Housing and Urban Development Office. Panama. December 16, 1982.

   At time of writing (March 31, 1983) this is the most recent status report on the subject.

8. Technical Assistance Mission Report: A Framework for Management Information Systems at the Ministry of Housing, Panama City, Panama. Edward S. Popko, September 20-24, 1982.

   This excellent description and analysis of the flow of information and data processing requirements within the Ministry also contains data concerning the hardware and software presently in place and operating for accounting purposes. The procedures to be used for the expansion into an information system are outlined in considerable detail.

Previous evaluation reports and memoranda pertaining to the HG-009 and HG-011 loans were also useful in gaining an understand of problems and performance of the Ministry of Housing.

B. Interviews with Officials

Interviews were conducted in Panama with USAID Regional Housing Office personnel and their counterparts in the Ministry of Planning and Ministry of Housing.

The evaluation team visited each of the MIVI field offices: Penonomé, Chitré, Santiago and David. In each case the provincial director was interviewed on the status of URBE-supported projects within the province.

Since the Home Improvement Loan Program is already being implemented, the depósito for building materials attached to each provincial office was also inspected.

In all visits to all MIVI offices, efforts were made to locate primary records pertaining to applicants and occupants of URBE-funded projects. The assistance of office personnel in abstracting data pertaining to residents in these projects was also requested and received in David and Santiago, the two locations from which projects-in-progress were administered.

C. Informal Surveys

The following projects were visited in the field by one or more members of the evaluation team:

1. Loma Colorada, David
2. Paraíso, David
3. Mi Dulce Hogar, Concepción
4. Juan XXIII, Santiago
5. San Martín de Porres, Santiago
6. El Forestal, Santiago
7. Solano, Concepción
8. Unnamed Site, Puerto Armuelles

In all cases, team members were accompanied by a representative of the nearest office of the Ministry of Housing.

Our original intention to conduct a sample survey of occupants of projects was frustrated for several reasons. All sites are now under construction and the larger portion of each is unoccupied. Therefore, the records on recipients of these shelter solutions proved to be a better data source. Also, our daytime visits to these sites took place during regular working hours. Due to the high level of employment of several members of each household, they were usually unavailable for interviews.

While Project URBE was initiated in January, 1979, HIG funding for its housing component did not became available until September, 1981. The evaluation team was looking at the accomplishments of only 18 months under the program. This factor was another limitation on the scope of the team's activities.

IV. Level of Accomplishment, 1983

In this section, which contains the descriptive portion of the results of the evaluation, each of the three dimensions of regional development described in the introduction will be reviewed:

1. Shelter solutions provided in Project URBE communities.
2. Institution building accomplishments.
3. Linkages constructed between institutions.

The level of accomplishment described will be analyzed and evaluated in the section to follow.

A. Shelter Solutions Provided: The shift from homes to loans

Three years elapsed between the signing of the Loan Agreement (August 1, 1978) and the approval of the amendment to the Implementation Agreement (August 25, 1981) which made HIG funding available for the first time. On that date, a loan (525-HG-010) was arranged for $12 million with the Riggs

National Bank of Washington, D.C. at a variable interest rate which presently remains at 12%. Due to much higher interest rates prevailing in the years following 1978, the GOP refused to utilize its access to the mortgage finance market until 1981.

Meanwhile, the Ministry of Housing continued to construct other projects and to receive applications from residents in Project URBE communities who desired shelter solutions when available. The result was that when the HIG loan was implemented in 1981, a backlog of clients had already been recruited in the course of the Ministry's routine operations. When HG-010 funding became available, these were the first to be served.

Instead of becoming a new program oriented toward specific needs of growth and service centers, then, the URBE housing component became an extension of the conventional activities of the Ministry of Housing. This did not imply a departure from the original project design, however. The Project Paper (BAS-002: 37) contains the following:

> "The total number of 2,186 solutions was established in consultation with the Ministries of Housing and Planning on the basis of requests already on file with MIVI, and on the basis of projected needs to support the development of the new industries."

Of those solutions, it may be perceived from Table 2 that a relatively small number (200) were for home improvement loans and serviced sites (820). The remainder (1,266) were for house construction options (URBE 4-6).

This original program was adhered to for approximately one-year following availability of finances. But during 1982, plans were formulated to shift the emphasis in MIVI's secondary cities program from housing to home improvement loans. This intention was fully documented in a reprogramming request submitted to USAID by the Ministry of Housing on December 23, 1982.

This request, entitled "Sub-Programa de Mejoramiento Habitacional, Documento de Implementación", notes that the first home improvement loans were provided by the Ministry in October, 1981, under the Torrijos-Carter Project (525-HG-011). This massive agreement which was negotiated as part of the Panama Canal Treaty conveys the sum of $75 million to the GOP, primarily for construction and improvement of low income communities within the Panama-Colon urban corridor. Of the total, $5 million was provided for 3,300 home improvement loans. Of this number 644 "Supervised Loans" were issued with a value of $956,576 (or $1,485 per loan) prior to December 23, 1982.

While the commitment of funds under Torrijos-Carter (HG-011) for home improvement was relatively small, it incorporated a more radical departure from the Project URBE design which was incorporated in the definition of the traget group. The Project Paper (AID/IAC/P-025: 9) affirms:

> "Recognizing the need to reach as large a number of the poor families as possible, the GOP has agreed to direct the program's funds to finance shelter solutions that will reach as low as the 5th percentile of income. It is expected that 80% of the funds will be allocated for shelter solutions for families earning below the 35th income percentile".

Unlike Project URBE, the Torrijos-Carter Project shifted its emphasis from the families near the median to families at the lower and of the distribution. This requires a parallel emphasis on cheaper solutions. In Torrijos-Carter the average home improvement loan was only $1,500.

As economic conditions worsened throughout Panama toward the end of the decate of the 1970's, it is to be expected that cheaper solutions for lower income households would become increasingly popular. Recasting the URBE Project shelter budget in the image of the Torrijos-Carter agreement required some breathtaking changes. But it was the intent of the reprogramming document of December 23, 1982, announcing what became known as the Home Improvement Loan (HIL) Program, to make those changes.

As demonstratred in Table 5 above, URBE 1-3 solutions were appropriate for households below the 30th percentile of income. In 1978, 18% of the budget was allocated to these solutions, consisting of site-and-services and improvement loans. In Table 7 below, which captures the consequences of the HIL document, URBE 1-3 solutions are to receive 71.3% of the budget, transferring the same proportion of all solutions within reach of households below the 30th percentile of income.

TABLE 7

Changing Impact of Solutions Accompanying the 1982 Reprogramming of Project URBE for Home Improvement Loans

	Original Project URBE Allocation (1978)		Home Improvement Loan Reprogramming (1982)	
	$$	%	$$	%
URBE Solutions 1-3	$ 955,000	17.7%	$3,851,500	71.3%
URBE Solutions 4 - 6	3,882,180	71.9	1,548,500	28.7
Inflation Allowance	562,120	10.4	---	--
TOTAL	5,400,000	100.0	5,400,000	100.0

The full impact of the reprogramming can also be perceived in Tables 8 and 9 below, which give the allocation of 1983 funding for house construction and home improvement loans by URBE Project community. These tables confirm that of the 3,401 shelter solutions now proposed, 1,001 will consist of houses and serviced sites, and 2,400 will be home improvement loans. Of the houses and serviced sites included, 717 were already completed or nearing completion at the end of 1982. From the beginning of 1983 forward, then, the URBE Project program in MIVI would consist almost exclusively of home improvement loans.

TABLE 8

Redistribution: Program 525-HG-010 (URBE)

(In thousands of B/.)

LOCATION/Province Urban Center/Project	Number of Solutions	Cost in 1000's of $	in 1000's of AID	in 1000's of GOP	Beneficiaries
GRAND TOTAL	3,401	6,860.2	5,400.0	1,350.0	110.2
URBAN CENTERS	1,001	2,539.9	1,943.7	486.0	110.2
Cocle	35	144.0	115.2	28.8	
Aguadulce	35	144.0	115.2	28.8	
Nata	35	144.0	115.2	28.8	
Chiriqui	837	1,740.8	1,316.2	329.1	95.5
David	649	906.5	654.6	163.7	88.2
Loma Colorada	603	494.0	395.2	98.8	
Paraiso	46	412.5	259.4	64.9	
Concepcion	88	304.3	237.6	59.4	7.3
Mi Dulce Hogar	48	164.3	125.6	31.4	7.3
Solano	40	140.0	112.0	28.0	
Puerto Armuelles	100	530.0	424.0	106.0	
Puerto Armuelles	100	530.0	424.0	106.0	
Los Santos	27	170.1	136.1	34.0	
Los Santos	27	170.1	136.1	34.0	
La Villa	27	170.1	136.1	34.0	
Veraguas	102	485.0	376.2	94.1	14.7
Santiago	102	485.0	376.2	94.1	14.7
Juan XXIII	48	195.0	144.2	36.1	14.7 2/
Ciudad (San Martin de Porres)	39	222.5	178.0	44.5	
El Forestal	15	67.5	54.0	13.5	
LOANS OF MATERIALS	2,400	4,320.3	3,456.3	864.0	

TABLE 9

Assignment of Home Improvement Loan Funds by Urban Center

City	1980 Population	Solutions	Cost
Aguadulce	10,659	138	248,433
Penonome	7,389	120	216,033
Santiago	21,809	347	624,633
Chitre	17,156	331	595,834
Los Santos	4,644	91	163,834
Las Tablas	5,230	69	124,233
David	50,621	974	1,753,234
Concepcion	10,460	169	304,233
Puerto Armuelles	12,488	161	289,833
		2,400	4,320,300

Even though the effective life of the URBE component within the Ministry of Housing has been brief, it has already undergone an alteration sufficiently radical to require that we treat the results in separate sections. In the first section below, the URBE site-and-services and housing projects will be described. The section following will be devoted to the current home improvement loan program.

1. Project URBE serviced sites and housing projects

The model MIVI continues to use in its housing projects depends on the presence of an organized group and on a great deal of cooperation from members of that group, individually and collectively. The Ministry of Housing prefers not to work with independent individuals and they seldom do so, except in the case of the new Home Improvement Plans.

In all the housing developments we will discuss later, the basic model is the same: MIVI receives a solicitation from some organized or semi-organized group for assistance in providing housing for its members. With its own resources or with resources that become available, MIVI then begins to help in the construction of housing. These groups may be invasions, cooperatives, or simply groups of families who have, in one way or another, come together to ask MIVI for housing help.

MIVI only solicits applications from groups because it depends upon a great deal of cooperation from those it services to bring down the cost of housing. In all cases, groups are required to provide some level of manual labor, materials, or technical know-how. In one case, housing recipients did the construction themselves. In another, a cooperative has assumed the mortgage for an entire project. In yet another, an electricians' union is providing all the wiring for its members' houses in order to reduce costs.

In selecting groups to support with URBE funds, MIVI officials were only required to determine that the applicants resided within the URBE area, and fell into a household income category established by USAID and GOP in the project implementation document. Since several years elapsed between the date of establishment of these income categories and the actual date of project construction, some adjustment was necessary to account for inflation.

The orginal distribution of incomes by decile, as established in 1979, is reproduced in Table 6 above. It establishes a median household income of $259 per month for the URBE area. The Implementation Agreement of 1979 (Section 6.04, para A7, and Annex A, para. 10) provides for the adjustment of this figure at 6 month intervals, "on the basis of... a formula agreed upon between borrower and USAID."

While we were unable to locate this formula in writing, USAID and GOP sources appear to agree that it consists of an annual increment of 6%, taken as a constant inflation factor. Thus, the 1979 median household income of $259 became an official upper limit of $307 in 1982, and $330 in 1983. The computation of percentile data requires that the threshold values of 1979 which separated the lower five deciles be likewise adjusted upward by the inflation factor of 6%.

Since the only figures appearing in Table 6 are incomes for the midpoints of deciles, the limits were defined by interpolation. These were then raised by the inflation factor to obtain a set of limits for the present year 1983. The results appear in Table 10 below.

TABLE 10

1983 Eligibility Levels for Shelter Solutions:
Decile Limits of Monthly Household Income

Decile	Decile Boundaries 1979	Decile Boundaries 1983
1 (0 - 9%)	0 - 84	0 - 114
2 (10 - 19%)	85 - 144	115 - 179
3 (20 - 29%)	145 - 184	180 - 229
4 (30 - 39%)	185 - 219	230 - 279
5 (40 - 49%)	220 - 258	280 - 329
Median	259	330

To compare the income distribution of the beneficiary population by decile with that for which the solutions were intended in the project design, Table 7 eligibility levels will be applied. The resulting percentage distribution of income groups will be matched with that appearing in the summary table included in the 1978 Project Paper, which is reproduced below.

TABLE 11

Percentage Share of Shelter Solutions and Total Investment by Decile of Income Distribution

10-20th	650	29.7%	$ 560,000	9.0%
20-30th	470	21.5%	984,000	15.8%
30-40th	510	23.3%	1,875,500	30.2%
40-50th	556	25.4%	2,792,200	45.0%
Totals	2,186	100.0%	$ 6,211,700	100.0%

Source: Project Paper BAS-002: Annex II-I, p.22

To offer an opinion of the affordability of the solutions provided at 1983 cost figures and payment levels, the income percentages which appear in Table 4 will be applied to the incomes reproduced in Table 10 above.

In addition to the criteria already presented, MIVI also applies an unwritten rule that at least 75% of all loans should go to individuals within the formal sector, making it possible for MIVI to deduct mortgage payments directly from their paychecks. This is the Ministry's method of ensuring that the loans are repaid without arrearages. In the new home improvement loan program, where MIVI anticipates greater difficulty with repayments, the goal is for 95% of the loans to be given to formal sector workers.

Once the Ministry's Panama and district offices have agreed that a group meets the criteria for inclusion in a MIVI project, the construction of the housing project is left in the hands of the district office. It is there that contracts are let for construction, the selection of residents takes place, and the collection of the loan payments is undertaken for those few individuals who are not making their payments through direct payroll deductions.

Looking at its resources and where it had demand, the Ministry of Housing found that it could begin work immediately in the provinces of Chiriqui and Veraguas. These provinces have the four projects that are near completion. In Chiriqui two are located in the city of David, and one is in the city of Concepcion. In Veraguas one housing project is being constructed in the city of Santiago. Several other projects are underway, but they are still in the planning stages.

In the following review, a separate section will be allocated to each of the two provinces: Chiriqui and Veraguas. Within each province, projects will be discussed in the following sequence: (a) those constructed or nearly complete; (2) those in progress; (3) those in the planning stage. An outline of the discussion to follow is presented in the summary below (Table 12).

(a) Province of Chiriqui

Chiriqui is the southwestern district of Panama bordering on Costa Rica and the Pacific Ocean. It is a rich area with an agricultural economy based on cattle, grain (primarily rice and sorghum), mil, bananas (in the plantation regions near the southern border with Costa Rica), and vegetables (in the mountains of northern Chiriqui).

Within the Province, MIVI has constructed, or plans to construct, five projects using URBE funds: two in the city of David, two in the city of Concepcion, and one in the city of Puerto Armuelles.

(1) City of David

David is the capital of the Province of Chiriqui, with a population of approximately 70,000 people in 1980. The present population is estimated at 75,000 to 80,000. David is the primary growth center in the URBE design for western Panama. Its commercial sector is even larger and more active than one would expect for a city its size. David serves not only Panama but portions of Costa Rica, as well. "Costarricenses" come into Panama to purchase manufactured goods imported into Panama essentially duty free --items such as radios, televisions, electronic goods, and certain other manufactured products.

For their part, "Costarricenses" raise produce more cheaply than can be done in Panama. "Chiricanos" follow the practice of buying Costa Rican food for their private consumption and selling their own produce in the city of Panama.

(i) Loma Colorada (construction complete)

Loma Colorada is located in the southeastern portion of David, two kilometers from the center of the city. It is about one year old and was originally conceived as a relocation for an invasion that had occurred earlier in the city. On several occasions when invaders have taken over land that was of high value or did not have secure title, the Panamanian government has entrusted MIVI with the task of finding new places for these people to live. The invaders were either people whose families had become so large they could no longer live with relatives or people who desired to escape the cost of renting in the city's center. As they did on the land they invaded, they started out in Loma Colorada living in temporary shelters constructed on their lots. After the original relocation effort, Loma Colorada was expanded and other families have arrived at several subsequent stages.

TABLE 12

Housing Constructed and Planned
with URBE Project Support

	Site	N	Type	Stage	Group
CHIRIQUI					
David	Loma Colorado	603	URBE I	Complete	Squatter invasion
	Paraiso	46	URBE 5-6*	In progress	IRHE employees
Concepcion	Mi Dulce Hogar	48	URBE 4* $3,500	In progress	Pre-cooperative Government workers
	Solano	40	URBE 4* $3,500	Planning	Pre-cooperative (not selected)
Puerto Armuelles	Unnamed	100	URBE 6* $5,300	Planning	Sindicato de Trabajadores Chiriqui Land Co.
VERAGUAS					
Santiago	Juan XXIII- I II	20 28	URBE 5 $3,600	Complete Planning	Juna XXIII cooperative employees
	San Martin de Porres	39	URBE 6 $5,705	Planning	Not formed
	El Forestal	15	URBE 5 $4,500	Planning	Not formed
LOS SANTOS					
	La Villa	27	New $6,300	Planning	Not formed
COCLE					
	Nata	35	URBE 5 $4,100	Planning	Not formed
TOTAL		1,001			

* Modified

The colonia is a site-and-service project (URBE-1) which now consists of 603 lots with water. House construction is left entirely to the residents to complete as they wish and as they can affort to do so. The total MIVI investment is $494,000, of which $395,200 (80%) is being provided by AID. An "anteproyecto", or feasibility study was done in 1980, and the project, so far as MIVI is concerned, is essentially complete except for certain legalities necessary to transfer land title to the residents.

Physical Aspects. Loma Colorada looks much like any other new housing development in Latin America. The tract of land it occupies is large --26 hectares. Lots are about 250 meters square --fairly large by Latin American standards. Infrastructure in the colonia is limited. The dirty streets are very dusty during the dry months, but mud is not a serious problem during the rainy season. Water comes through a two-inch pipe along the edge of each lot, and people must connect with the water system themselves. Most lots with people living on them have a faucet. There are, however, no sanitation facilities. Few houses have septic tanks, most people make do with latrines. Water from washing and other domestic use is thrown into the streets, where it runs down open drainage channels until it evaporates.

Electricity is arriving, having now reached the edge of the neighborhood. MIVI, however, is not concerning itself with the placement of electricity on lots; that is also left to the colonos themselves. The introduction of electricity is being handled by the comite de vivienda, the organization within the colonia responsible for such matters.

At present, 24% of the lots are vacant; 22% have temporary shelters in which families are living; in another 16% families are also living in temporary shelters but have already begun construction of a permanent house on the lot; 28% of the lots have a permanent house partially completed but with no one living on the site --that is, people are building their houses before moving in; finally, 10% have some type of permanent structure occupied by the residents.

Evidence of active construction can be seen everywhere in the colonia. People work constantly on their houses. In fact, the amount of construction that has occurred in the eight months the colonia has actually been occupied is amazing. The speed of construction can be attributed to the fact that the project was originally a settlement of invaders who needed housing.

Despite its limited role in Loma Colorada, MIVI has aided in getting construction underway. The agency organized two weekend excursions using MIVI vehicles to take colonos to a ranch owned by the brother of one of the officials at the local MIVI office. There, people were allowed to cut bamboo for putting up temporary shelters. Everyone involved with these excursions described them as a grand experience --a great big picnic.

In addition, MIVI provides technical assistance for the autoconstruction of homes, consisting of help in developing architectual plans. It also provides the services of an albañil, who is present at all times to give construction advice. Any home owner who has a question regarding the technical aspects of laying a foundation, raising a wall, or placing a roof

may receive help at no additional charge. MIVI has also provided a few small home improvement loans for people who could not begin construction without some assistance --e.g., to put in a water connection or a house foundation.

Additional help has been provided to one group of people by their union. The transportistas (the transport workers --bus drivers, etc.) have gotten assistance in the form of materials and building loans. This group accounts for a substantial portion of the occupied permanent homes.

Socioeconomic Aspects. The socioeconomic characteristics of Loma Colorada described here are based on a 16% sample of the residents. This sample of 94 households corresponds to the people to whom land titles had been issued. It is random in the sense that lots were randomly assigned to people in Loma Colorada. Folders on the remaining individuals at the main office in Panama City could not be located.

Demographically, the population of Loma Colorada is young to middle aged. Average age of household heads is 32 years, with the modal category (28% of the population) being ages 25-29. The range in age of household heads here is greater than in any other project. The sex of household heads who petitioned for a lot was 61% female. This may be because they held formal sector jobs from which payments could be deducted.

The concentration in the early stage of development, during which households gradually outgrow their rental space or quarters with relatives, is indicated by the fact that average size is four individuals, one less than the Panamanian average. The modal group (22% of the population) is three household members, but the range (one to eight) is large.

The socioeconomic status of Loma Colorada residents establishes it as a blue collar community. Few highly skilled workers are to be found. The most representative group may be the transportistas (bus drivers) and others of similar skills. The occupation lists reveal a number of artisans, craftsmen and laborers. There are few people in commercial or clerical positions. The households seem to be quite homogeneous in their upper-lower class status.

Twenty percent of the households have more than one worker. This proportion is low in comparison to other projects and other areas of the city, but is characteristic of an invasion population. A problem for these households is the lack of income that a second worker can provide, but when children are small, it is especially difficult for both spouse to work, even if jobs are available for both.

Incomes of these households are the lowest of any of the housing developments being funded through URBE. Household heads make an average of $193 a month, in the 20-30th percentile range. The model income group for household heads is the 10-20th percentile, with 27% falling in that category. Total household incomes are slightly higher, averaging $225 per month, in the 20-30th percentile range. The modal category is, however, the 10-20th percentile (25% of the households). The population is working class, with very limited resources.

Financial Aspects. The lack of resources is reflected in the financial position of Loma Colorada. Loans are projected to be $1,050 each, for 25 years at 10% interest. In the case of Loma Colorada, the government of Panama apparently assumed 2% of the interest being charged for Housing Investment Guarantee funds. Although monthly payments are only $10, Loma Colorada has a higher late-payment rate than is found in other housing projects. For the 570 lots for which MIVI is currently receiving payments, total receipts should equal $6,700 per month. Arrearages, as of the last reporting period (February 1983), amounted to $27,209, or approximately four months of payments.

It is hard to accept this, since most people have their mortgage (and utility) payments deducted directly from their wages. MIVI's explanation is that this population has the least job stability of any of the groups it works with. Even though payments are being discounted directly, workers are susceptible to losing their jobs and tend to move more frequently from one job to another. Thus, there are periods during which no income is earned from which deductions can be made.

No data were available on how many people have simply stopped paying on their lots, as compared with people who, for one reason or another have not been able to pay the last few installments. Eleven percent of the residents responsible for payments on lots in Loma Colorada are, however, over a year in arrears.

Conclusions and Comments. Few residents were found during daytime visits to the site of Loma Colorada. Persons encountered expressed satisfaction with the community. All indicated that it was necessary to manage money carefully; some stretched their buying power by purchasing food in Costa Rica, where it is much cheaper than in David. The hope was expressed that electrification would be available. There was little concern (perhaps, little realization) that this amenity would place further stress on household budgets which are already tightly stretched.

MIVI officials in the David provincial office consider Loma Colorada to be a success. They hope to be able to continue with the process of relocating invasions as they occur, thus solving the squatter problem which has been a major public concern in the past decade. To MIVI, this solution serves as a political motive to the government to provide additional resources for housing.

MIVI officials say that their greatest demand, aside from home improvement loans, is for lots with water. If they could choose a single type of project to expand in the future, it would be this. They suggested that lots-with-water projects could be combined with home improvement loan programs to make it possible for people with higher incomes to build better housing more quickly.

The Ministry of Housing has fostered a solution at Loma Colorada that is compatible with AID's interest in reaching the 20-40th percentile income group with a portion of its funds. In addition, MIVI has managed to speed the development of Loma Colorada by being sensitive to individual needs and by helping in minor ways that are nevertheless critical to advancing construction.

As mentioned earlier, MIVI assisted a few of the households with early home improvement loans. There is also talk about the possibility of granting URBE home improvement loans in the future to people in Loma Colorada who had not yet terminated construction of a permanent house. This would appear to be a violation of the current home improvement loan guidelines, which state that individuals who have already received money from MIVI fall into a lower priority category.

There is a tendency for planners and administrators to push site-and-services projects ahead much more quickly than a normal rate of evolution would indicate as appropriate. The provincial director of MIVI wants a complete colonia as an example of MIVI's efficiency in getting permanent housing with basic utilities to people in need of a decent place to live. While accelerating construction is certainly desirable, problems arise when early completion places undue financial burdens on the families being helped.

The people of Loma Colorada have only meager resources. Those few who have managed to complete permanent houses have done so because they received assistance from their union or some other similar group. The families who do not have such assistance, or who must rely solely on a single wage earner with uncertain job stability, can very easily become overextended. It would be better for them to avoid the attempt to comply with administrators expectations concerning early completion of a permanent dwelling.

There is another disquieting conclusion. One may question the viability and economic rationality of having 603 households (and probably more in the future) densely packed into 26 hectares of land with only septic tanks and pit latrines for human waste disposal. In projects to be described below, it will be noted that the inclusion of sewerage systems added substantially to the prices of shelter solutions. In the interest of promoting public health, however, it could be argued that this cost should be borne by the City of David in the case of Loma Colorada.

(ii) Paraiso (under construction).

Paraiso, MIVI's second project in David, is also in the same area as Loma Colorada: the southeast portion of the city two kilometers from the center. In every other respect, it provides a sharp contrast. A glance a Table 12 will confirm that where Loma Colorada has the lowest cost per site proposed for the HG-010 housing program, Paraiso has the highest.

Paraiso has been in operation for serveral years. It now has approximately one hundred units occupied by households whose socioeconomic status is generally higher than that of the residents of Loma Colorada. Household heads are government workers (mostly middle-level bureaucrats) or middle-level functionaries from the private sector.

The AID portion of the Paraiso project is an addition consisting of 46 two-bedroom houses with full services to be added to the units already in use, at a cost of $412,500 --$259,400 (63%) of which will be AID's contribution.

The new section of Paraiso will provide housing for white-collar and upper-level blue-collar workers of the federal electric and hydraulic commission, the Instituto de Recursos Hidraulicos y Electrificacion, commonly referred to as IRHE. The feasibility study for the Paraiso addition was done in 1982, and at this point all the infrastructure is completed --streets, electricity, water, drainage, and a sewage system that feeds into a large septic tank --but house construction is only 20-30% complete.

Physical Aspects. Physically, Paraiso looks very much like any other middle-level development in Latin America --rows of concrete block houses with tin roofs (painted, in this case). The lots are fairly large --250 meters square-- which provides room for later expansion or for growing gardens. In the new section of Paraiso two types of units are being built. Seven units are to be 39 meters square --two-bedrooms with a sala-comedor (combined living-room/dining-room/kitchen). The remaining 39 units will be almost twice as large --73 meters square. The second set of units was designed in conjunction with IRHE to meet the special requirements of its population. These units consist of two bedrooms, a sala-comedor, separate bath and kitchen.

In Paraiso no additions are being made to the houses currently under construction. No individuals have hired an outside contractor to expand or modify their house before they move in. This is distinctly different from what is happening in another MIVI colonia.

The Comite de Vivienda of IRHE has aided greatly in reducing the cost of housing per unit and in facilitating the completion of the new section of Paraiso. IRHE has allowed its workers to use official vehicles to deliver materials. It has made direct contributions of materials and labor to reduce the cost of the houses for their owners. IRHE is contributing $878 in materials and $590 in labor to each of the smaller houses. The materials are primarily electrical, and the labor is to electrify the houses and to haul construction materials. IRHE is similarly aiding the construction of the larger houses with a grant of $2,000. Materials worth $1,393 are being provided, along with $650 in labor.

Socioeconomic Aspects. The original forms used to gather data on the households to reside in the new section of Paraiso could not be obtained. A search was made for them in MIVI's main office in Panama City and in the district office in David, but they were not located. The data reported here come from the feasibility study MIVI conducted prior to beginning construction on the addition to Paraiso. According to this source, the median household income was $300 per month.

This project --both old and new sections-- provides housing for upper-level blue-collar workers and middle-level functionaries in the government and private sector. Information on the age and sex of individuals receiving loans for homes in the new section of Paraiso is unavailable. Household size for this part averages five individuals, with the mode also being five (39% of the household). The is the average for Panama.

The new occupants of Paraiso will be drawn exclusively from employees of IRHE. The population being serviced is expected to be the comission's professional and middle-level staff. The incomes of all households and households heads are within the 40-50th percentile group.

Financial Aspects. Financial planning for the addition has not been finalized, since all the houses are not complete. The smaller units (39 square meters) are expected to cost $7,031 and will be financed at 12% interest over 25 years, with monthly installments of $63.90. The larger units (73 square meters) will cost approximately $9,252, again, financed over 25 years at 12% interest, with a monthly payment of $84. The contributions made by IRHE must be subtracted from the prices quoted above to get the actual cost per resident.

Although payment mechanisms have not yet been established, there is no reason to believe payments for mortgages and utilities will not be deducted from paychecks issued by IRHE. This practice is clearly the preferred method for collecting payments due. We can, however, examine the payment structure for the older section of Paraiso. Information is available on 71 of the households living there. These households have a total monthly indebtedness of $4,891. Currently, they are behind in their payments by $6,660, somewhat over a month's indebtedness.

MIVI officials seemed unconcerned over this degree of tardiness in payments, accounting for it by the fact that people switch jobs periodically. When this happens, they often fall behind a month or two in their payments before collections are reestablished. Comparing these households with those in Loma Colorada, we find no cases of families a year or more behind with their payments. At most, residents may be four or five months behind, but these cases are rare.

Conclusions and Comments. MIVI's officials speak enthusiastically about Paraiso. They remark on the "valiant" help they have received from the workers of the electric commission and from the comaission itself. This assistance as an important aspect of their being able to build the houses at a bargain price. MIVI is anxious to continue work in Paraiso, because the entire range of infrastructure for residential community is already in place. By expanding Paraiso, this infrastructure can be put to maximum use.

This project clearly falls within the URBE concept. MIVI is providing housing for the 40-50th percentile income group. MIVI has long been engaged in providing the kinds of housing solutions that URBE seeks to foster. In this case, money from URBE is being used to graft an addition to a similar project already in existence.

MIVI has been aware of the housing needs of this population segment in David. The private sector is not servicing it at present, and there is no indication that private contractors are interested in doing so in the future. Several private housing projects are under construction, but even the smallest units tend to start between $10,000 and $15,000, placing them out of reach of the population serviced by Paraiso.

(2) City of Concepcion

Concepcion has been designated as a service center in the URBE project. It is located about 20 minutes by car west of David on the Pan American Highway. Passing through from the north is the road to the highlands of Chiriqui, which is a major vegetable- and milk-producing region. Concepcion is, however, overshadowed by David as a commercial center. People in the region --even those in the highlands-- tend to drive to David to make many of their purchases, including auto parts and components for machinery. Concepcion does provide such essential services as health care, schooling, gasoline, and so on, for the immediately surrounding area.

In 1980 the population of Concepcion stood at 10,460. The city is now estimated to have around 12,000 people. In the last two decades it has undergone rapid growth, changing from a very small to a much larger town. Reflecting that growth, which includes an increasingly active middle-level government and industrial private sector, the Ministry of Housing has developed two projects in Concepcion --Mi Dulce Hogar and Solano.

(i) Mi Dulce Hogar (under construction) 1/

Mi Dulce Hogar, located on six hectares of land west of Concepcion near the cemetery, is about one year old. It is a product of MIVI's work with a pre-cooperative --that is, a group of people who have organized themselves into a housing cooperative but have not received all the papers necessary to become officially recognized. Despite their lack of legal status, this group, composed of middle-level professionals and upper-level blue-collar workers, purchased land and made it available to MIVI to use for a housing project.

On the six hectares site there are 48 lots, approximately 600 square meters each. The feasibility study was finished in 1982, and construction is now 70-80% complete. Although the project is one year old, few people have moved in, and most of the houses are not ready for occupancy. The total investment is $157,040, of which $125,632 (80%) are AID funds.

Physical Aspects. Mi Dulce Hogar looks much like a smaller version of Paraiso. Unlike the latter, however, infrastructure is minimal. It consists of a limited water supply which enters the colonia through the cemetery in the form of a single one-inch PVC tubing. The colonia intends to replace this with a four-inch system for which pipe is being purchased by the home-owners. They expect that the system will be operational within a year and it is intended to serve the entire settlement (48 lots). There are no sanitary facilities. People are expected to put in septic tanks, although it appears that some households are using latrines. Electricity is now in the colonia and available in every home.

1/ This is the only URBE neighborhood with a private development nearby. An adjacent piece of land has been subdivided, provided with minimal services, and lots are being sold to those wishing to construct their own houses. At present, one house has been finished. The stimulous for this subdivision apparently came from Mi Dulce Hogar.

The basic unit being constructed is a 46-square-meter house with two bedrooms, a sala-comedor, separate kitchen, and small wash patio on the back (solution type URBE 4). House construction is almost finished, and five families have already moved in. These families had been forced by their landlords to leave their rented quarters; so MIVI has hurried along the construction of their houses.

One of the interesting aspects of Mi Dulce Hogar is the amount of additional construction taking place. Thirty-three percent of the future residents have hired contractors to add units to their houses. Of the five occupied houses, three have additions to them. This contrasts with Paraiso in David, where additions are not being made.

Socioeconomic Aspects. In Mi Dulce Hogar the average age of household heads is 32, with the modal age category being 25-29 years (35% of the population). The 30-34 age group, which includes 33% of the household heads, is also large. Household size, as one might expect of a young group, is small for Panama, with a mean and mode (29% of the population) of four individuals. Thirty-nine percent of the houses were solicited by women.

Household heads in this neighborhood are mostly in the formal sector; 73% work for some government agency. The predominant occupational category is that of teacher, with 43% of the household heads employed by the Ministry of Education. Twenty-nine percent of the households have two workers.

Incomes for this fairly well-educated group tend to be high. The average income of household heads is $297 per month, placing it within the 40-50th percentile range. Total household incomes are, of course, higher --$349 per month being the average, which is over the median figure for the western regions of Panama. Fifty-five percent of all household incomes were over the median figure.

The higher incomes in Mi Dulce Hogar explain the amount of added construction occurring in comparison to other similar colonias. Because relatively affluent households are receiving a basic unit with minimal monthly payments, they are able to use their resources to expand their houses before they move into them.

Financial Aspects. Because few individuals have actually occupied Mi Dulce Hogar and because the land has not been turned over to the future residents, MIVI is not yet collecting payments. We have no fixed figures on mortgage costs. But costs and monthly payments are suggested in the feasibility studies. It was estimated that houses would cost around $3,271 each. Loans would be made for this amount at 12% over 25 years, with monthly payments of $37.55. Performance with respect to monthly payments cannot be assessed.

Conclusions and Comments. Several residents at Mi Dulce Hogar were favorable to the colonia. The Comite de Vivienda set up by the residents to obtain the lots and housing is now working to increase the capacity of the water system and to bring in electricity and other services.

One complaint was that the houses were inadequate in their size and in the services available --electricity should have been installed as part of the package, along with a larger water supply and a sewer system. Some also complained that the houses were poorly built.

MIVI personnel were positive about Mi Dulce Hogar but not as enthusiastic, as they were about Loma Colorada and Paraiso. The pre-cooperative which organized this housing project was guided by one of the local politicians whose primary aim was to gain political strength among the residents. The people in Mi Dulce Hogar are not as eager to work together to upgrade their own housing as the people in Paraiso or Loma Colorada.

The lack of enthusiasm for collective work and action on the part of this group, comprised mostly of white-collar government functionaries, may lead to difficulties for the Ministry of Housing in the future. This population could apply political pressure to have MIVI provide services they do not usually furnish in this kind of housing project making MIVI incur costs that, for political reasons, may not be transferable to the project.

The dissatisfaction which appears to be mounting among the residents with the project, and among MIVI officials with the residents may have a simpler explanation. Mi Dulce Hogar represents a mismatch between services and household income levels. It is one of the cheapest URBE solutions ($3,500 per unit) provided to one of the most affluent groups of government workers. Their dissatisfaction with the results leads them to undertake modifications and complain of the lack of services before the units are occupied.

In the future, MIVI should be guided both by this experience and also by the opposite case, which appears in Paraiso. There a moderate income population has received the most expensive housing ($7,000 to $9,000) found in the URBE area. Their level of satisfaction with the quality of the solution provided was very high.

In conclusion, Mi Dulce Hogar falls well within the URBE concept. It reflects a need for housing for this particular income brackedt. The fact that a certain percentage of the population falls above the 50th income percentile may indicate that the income distribution assumed for the urban areas of western Panama is in need of correction.

(ii) Solano (planning stage)

Solano is a housing project to be built in western Concepcion, close to the Pan American Highway. It is to contain 40 units and is the result of a solicitation by a pre-cooperative. The leader happens to be the local representative to the federal congress who is helping the members to get housing from MIVI.

Today the tract of land (about two hectares), which is being provided by the pre-cooperative, is a cornfield. The lot is well located, with water presently available and with electricity close at hand. Given that specific tanks are the normal mode of sewage disposal, infrastructure will not be a problem to install. Plans are to begin construction within the next month if AID approves the feasibility study, which appears to be about one-third

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complete. The projected cost of the entire project is $140,000, with AID providing $112,000 (80%) of that amount.

The houses to be constructed in Solano correspond to URBE type 4 -- a 46-square-meter house with two bedrooms, a separate kitchen, a sala-comedor, and wash patio in back. In order to bring down the cost of the units, the people of the pre-cooperative are gathering together as many concrete blocks as they can.

It was not possible to obtain any social or economic characteristics of the future residents because questionnaires had not been administered to this group. In fact, that is the source of delay in the completion of the feasibility study. However, judging from the cost of these units -- they are very similar to those en Mi Dulce Hogar -- and from conversation with individuals at MIVI, one can conclude that the population will be much like that of Mi Dulce Hogar. This project is another attempt to service primarily white-collar, middle-class professionals and government functionaries in the 40-50th percentile income category.

(3) City of Puerto Armuelles

Puerto Armuelles, a port town originally developed by the United Fruit Company to export bananas from its plantations in this area of Panama, is located in the southwest corner of the district of Chiriqui. Today it is the site of Pacific terminus of the transcontinental oil pipeline which has been built across Panama. A commonly held belief is that this pipeline, in operation since February 1982, will have a great economic impact on this region, although one wonders how many jobs will be created, given the highly mechanized nature of the pipeline.

The project consists of 200 units, proposed by MIVI in Puerto Armuelles. However, URBE participation is planned only for the 100 units comprising the first phase of the project. These 100 units will cost a total of $530,000, of which AID is funding $424,000 (80%).

(i) Puerto Armuelles (planning stage).

The 100 units are to be located six kilometers from the center of town and will be complete two-bedroom houses with full services. The Chiriqui Land Company, the local holding company of the United Fruit Company, has agreed to place water, electricity, and sanitation facilities on the land site.

This project is one that has evolved from a land and labor dispute between Chiriqui Land Company and banana plantation workers (sindicato de trabajadores) over the provision of housing, and this is the solution reached in conjunction with MIVI. All occupants will be employees of Chiriqui Land Company. At present, MIVI does not know the identity of the future residents. Officials report that the company and the union will be jointly responsible for selecting them.

Houses are expected to cost about $5,300. As of this date, no actual amortization schedule has been skept up by MIVI. The feasibility studies are in the very early stages, although officials in MIVI's district office in David claim they will begin construction within the next month.

Of all URBE housing projects, this one seems the least compatible with the URBE project. It is located well outside the town of Puerto Armuelles, on the edge of the banana plantation, and people who live there will be bused directly to work. Access to food, groceries, and other necessary items will be difficult. MIVI claims there will soon be a small commercial area at the crossroads where the road from this project meets the highway to Puerto Armuelles. There is, however, no evidence that will happen. In order to shop, residents will probably take a bus to Puerto Armuelles or to the Costa Rican border. Otherwise, they may make their purchases at the banana company's nearby commissary.

Another feature of this project which does not seem to conform to the intent of URBE is that it is a direct result of labor negotiations between the plantation and its workers. It represents an attempt by a large corporation to solve some of its labor problems, rather than a real concern for providing housing in urban communities designated as service centers. While the town of Puerto Armuelles may expand, this project which might be expected to alleviate a housing shortage associated with that expansion is to be located well away from the urbanized areas.

(b) Province of Veraguas

Veraguas is the province located east of Chiriqui, transected by the Pan-American Highway. It has a varied agricultural base which includes large sugar plantations in the north and rice fields in the south. Aside from its profitable large farm operations, however, the province includes a very large number of marginal cultivators. The consequence is that household incomes are much lower than those in Chiriqui. Santiago, the capital of Veraguas, has three projects in the URBE-sponsored housing program.

(1) City of Santiago.

Santiago, with a population of 22,000 in 1980, is the commercial center for a large area, comprising not only Veraguas but parts of Chiriqui and Cocle, as well. It has substantial commercial activity; a great many trucks and buses pass through on the Pan-American Highway. Santiago is also the administrative center for an area larger than its own district. The Ministry of Housing in Santiago, for example, makes collections for projects in the districts of Veraguas, Cocle, Herrera, and Los Santos. The responsibilities of Santiago, which involve more than its immediate hinterland, thus tend to go beyond those of other similar cities.

Three projects involving URBE funding are located in Santiago: Juan XXIII (which actually has two distinct parts), San Martin de Porres, and El Forestal. Of these, only Juan XXIII, Part I, is nearing completion.

(i) Juan XXIII (part completed, part in planning stage)

Juan XXIII is a housing project located in the northeast section of Santiago, in the bedroom community of El Forestal, approximately five kilometers from the center of the city. Most of the people in El Forestal work either in minor agricultural activity in the immediately surrounding countryside or in Santiago.

Juan XXIII takes its name from a large, well-organized agricultural cooperative in the district of Veraguas, which initiated this housing project for the benefit of co-op employees. The co-op Juan XXIII now has 1,500 members scattered throughout the district, but the bulk of its administrative, processing, selling, and purchasing activities are located in Santiago.

The co-op had long considered proposing a project for staff members unable to obtain housing through the commercial market in Santiago. These included people at all levels of the co-op structure, from albañiles, truck drivers, and stockmen in the co-op grocery store, to administrators. Approximately 50% of the people being considered for these projects rented in the center of the city. Another 30% lived with relatives without paying rent. The co-op approached MIVI for help. It had land it could make available for house construction, but MIVI did not have resources to provide loan money until URBE funds appeared.

Juan XXIII has been planned as an 80-unit housing project. The first two segments, totaling 48 units, are being funded through URBE. Twenty units -- Juan XXIII, Part I -- are now complete and will be the subject of this discussion.

Juan XXIII, Part I (completed)

Like most other projects associated with URBE, Juan XXIII, Part I, is about one year old. The people living in the 20 houses now occupied came from the center of the city; 60% were renting homes at an average monthly cost of $27. The majority of household heads are white-collar workers in the co-op. Total cost of construction is $72,000, of which $45,584 (63%) is being provided by AID.

Physical Aspects. Although Juan XXIII is still early in its development, it looks much like other housing projects. Occupying about five hectares of land, the lots for the 20 units average 341 square meters. Water is being brought to the houses from El Forestal, and electrical connections have been installed. The streets are unpaved, and no sanitary facilities are provided. People must put in their own latrines or septic tanks and bathrooms. Water used for washing runs into the streets and then down channels at their edges.

The house type resembles the URBE-5 solution. It contains two bedrooms and a sala-comedor with electricity, and water attached at the back porch is available for the addition of a bathroom at some future date. The total area constructed is approximately 40 square meters.

These houses line three streets at one edge of the parcel of land that will eventually become the larger Juan XXIII housing project. In contrast to what is happening in Mi Dulce Hogar, no additions are being made to these houses. People are living in the original design without modification, although the houses in the two colonias are essentially the same. Residents said they lack additional resources to expand their houses at this time, although they hoped to do so in the future.

This construction project was aided by the employer of the residents. The co-op gave the land and provided $750 per unit in materials and labor for construction. All additional nontechnical work involved in constructing the houses was done by the future residents. The Ministry of Housing provided necessary technical personnel: the head mason, the albañil, the plumber, and the electrician.

Socioeconomic Aspects. Demographically, the households of Juan XXIII, Part 1, are relatively young, the average age of the household heads being 29 years and the range from 21 to 40 years. The modal age group is 25-29, in which 40% of the household heads fall. Household size is about average for Panama: five members. The range falls between two and eight and the mode is five persons (40% of the households).

Of the loans given for the construction of houses in Juan XXIII, 30% went to females working for the co-op. This is not to say they are female-headed households. In some cases, the woman's husband worked outside the co-op. Sixty percent of the recipients were white collar workers.

Economically, these households tend to fall in the upper income brackets of the URBE population. All households have at least one member working for co-op, since this was a prerequisite for moving into the colonia. Forty-five percent of the households have more than one worker in the household --in most cases, the household head and spouse.

The average monthly income of household heads is $259, which falls in the 30-40th percentile range. This is also the modal category. Household incomes are much larger. Modal and average income is over the 50th percentile, the average being $364 per month. This income was described as fairly minimal for Santiago, even though it exceeds the limit for Project URBE support.

Financial Aspects. The total cost of each unit was $2,865.91. Loans were for 25 years at 12% interest; monthly payments are $32.89, which includes insurance and all carrying costs on the loan. Juan XXIII is administered as a community project, which makes it unique within URBE. Here the individual owners are not responsible for their loans. Rather, the loans are carried by the co-op, in keeping with its credit policy on venture loans to members.

The co-op has the task of collecting the amount of the mortgage payments from the residents. AID agreed to this arrangement, and it seems to have worked well. Currently, the co-op's monthly payment to MIVI is $794. It is about $73 in arrears.

Juan XXIII, Part II (Planning stage)

The second component of Juan XXIII consists of 28 similar solutions, scheduled to be built in 1983. The houses are also for families who live in the city itself, 54% of whom pay rent averaging $45 per month. The other 46% live with relatives. Juan XXIII, Part II has the same infrastructural component as Part I.

Construction to date is nonexistent, although it is expected to begin shortly. The land is in the process of being cleared by the cooperative. Construction materials to be supplied by the co-op are also being placed on the site. Temporary shelters to store these materials are presently being constructed. All that is needed to begin building houses in the termination of the feasibility study, which is still an early stage. The final affirmation by AID that Part II falls within the scope of URBE is also required.

Socioeconomic Aspects. Demographically, household heads who solicited housing are 75% male. Their average age is 29. Household size is slightly smaller in Part II, with an average of four members. The modal size (39% of the households is three individuals, and the range is from two to eight members.

The employment of these households is somewhat different from those of Juan XXIII, Part I. In Part II, only 40% actually have a member who belongs to the co-op. The executive director of the co-op affirmed this, saying that this organization viewed the housing project as a social service. In addition, only 25% of the households have second workers.

Household incomes tend to be slightly less than for households in Part I. Average income for household heads is $229 per month, in the 20-30th percentile range. The mode is the 30-40th percentile, as in the first group. Total household income is also lower, the average of $261 per month falling in the 30-40th percentile range. The modal category contains 50% of the households which also fall within the 30-40th percentile of household income. This differs from the earlier group, where the modal category was over the 50th percentile.

Financial Aspects. The actual cost of construction has not yet been determined, although it should resemble that of Juan XXIII, Part I. The houses are essentially the same, with the same lot size and the same services. Again, the loan will be administered by the co-op, which will take responsibility for the loan and collect payments individually from recipients.

Conclusions and Comments. Co-op members are enthusiastic about the housing project. They were pleased to have helped in the construction which gave them slightly more living space than they might otherwise have had. The co-op experience has worked well for them.

The administrative director of the co-op is equally positive about the project. The collaboration with MIVI has been quite successful. By working together, the two organizations were able to accomplish more than either could

have done alone, and the prospects are good for future collaboration. MIVI's concern at present is the scarcity of land for housing construction in the Santiago region, and the co-op has land it can make available to MIVI for housing solutions.

The co-op officals expressed apprehension about the cost of money. They felt that a 12% interest rate was too high, considering the incomes of the people receiving the loans. Since the loan implementation agreement's amendment of 1981 contains a variable interest rate provision, it is possible the cost of money may be reduced to borrowers in the future.

MIVI personnel in Panama and Santiago also expressed satisfaction with Juan XXIII. It is a co-op with a proven track record. It has been in existence for 16 years and has a large resource base with which to secure its loans. MIVI only deals with a single payment each month, making its job of administering the loan much easier. With a successful project already completed, MIVI officials are looking forward to working with Juan XXIII in the future.

The co-op has a committee that decides on costs and financing for its members. Working with Juan XXIII does not involve trying to assemble a group to arrive at a consensus.

MIVI officials expressed concern over the lack of sanitation facilities. The septic tank-latrine solution will work for a time, but waste water is simply allowed to run into the streets. MIVI would like to install a system that would funnel water into a dry arroyo bed or treatment facility, moving it off the streets. While this concern with used water was expressed only at the Santiago district office, all the same conditions exist in other projects.

Juan XXIII is serving a clientele of technical, administrative and clerical personnel which fall within the URBE concept. However, when total household income is considered, many have earnings above the limit for HIG loan support. The problem presented by the median income ceiling for eligibility is not unique to this project. Since the present home improvement loan program is directed at a lower income level, however, it may have been solved by a change in MIVI policy just completed.

(ii) San Martin de Porres (Planning stage)

San Martin de Porres is a housing development to be located in the near noth-east portion of the city of Santiago, approximately one kilometer from the center of the city. It is a large project for upper-class workers. MIVI has been involved with this community since 1969 when it constructed 116 housing units on the site. In 1977, another 171 units were constructed.

The current project calls for construction of 39 additional units with URBE funds at a cost of $222,500, of which $178,000 (80%) will be AID money. The feasibility study for this project is in its early stages; and MIVI has not selected the individuals to live in this project, although it has 44 applicants for the 39 units.

Physical Aspects. The solution to be used corresponds to URBE 6 housing. It is a unit of 45 square meters consisting of two bedrooms and a sala-comedor on a lot measuring 250 square meters. Infrastructure consisting of water, electricity, and sewer system is installed within the site to serve all additions presently proposed, including the URBE-funded portion. This project is located in an area devoted to middle-class housing. The Seguro Social and several other state agencies are also building housing in the same area for similar populations.

Socioeconomic Aspects. The data reported here will be on the 44 households which have solicited a place in San Martin de Porras. It will be assumed that they are representative of earlier households residing in this project, and of those entering the other government housing projects nearby.

Household heads average 36 years of age, with the modal age group being 25-29 years (33% of the population). The age range is 20 to 54 years. Sixty-four percent of the applicants are males. Household size, averaging two members, is much lower than the national norm. The mode is three persons representing 33% of the households. The range is from two to eight members.

Occupationaly, 70% of household heads are white collar workers. Thirty-four percent work for the Ministry of Education. This high degree of participation confirms reports that the Ministry of Education has been very forceful in demanding government aid for its employees. Only 14% of the households in this group have second workers.

Incomes are high in this community. The average income of household heads is $310 per month, which falls within the 40-50th percentile range. Thirty-six percent of household heads have incomes over the 50th percentile. Total household income is not much higher than that of household heads, given the small number of second workers. The average is $327 per month, again above the 50th percentile. Thirty-six percent of the households have a total monthly income higher than the accepted median for western Panama.

Financial Aspects. Because the feasibility study has not been completed, financial aspects of this project are sketchy. The houses are expected to cost about $5,705 each. The loan will be paid over a 25-year period at 12% interest. The actual monthly payments have not been calculated, nor has the total cost for the loan. Given the high proportion of white-collar workers employed in the formal sector, payment of these loans will be through direct discount from the individuals paychecks.

Conclusions and Comments. MIVI is serving a group that has been designated to benefit through URBE --those whose incomes fall in the upper range of eligibility. It also seems that this group is in need of some organized help in obtaining housing. Private housing in western Panama seems scarce, and when it is found, as in David, it tends to be priced out of the range of this population.

The present status of San Martin de Porres has generated one source of concern. When this project is completed MIVI will have no more land upon which to construct housing for this population. Officials believe they will

have a land scarcity problem in the future, and they would like assistance from the central government and perhaps from AID in acquiring land for future projects.

(iii) El Forestal (Planning stage)

El Forestal is a community northeast of the city of Santiago, approximately two kilometers from the center. It is a rural village that has become a bedroom community for the nearby city. The El Forestal project is one that involves the construction of houses on lots already owned by the occupants.

It is unlike the other URBE-supported projects. The houses will not be congregated in a single block, making it difficult for MIVI to plan for services to each unit. At present, 15 units are planned at a cost of $67,500, with AID contributing $54,000 (80%). The feasibility study is still in its early stages, but 14 individuals have been identified as potential recipients of loans.

Physical Aspects. El Forestal has the appearance of a poor, traditional community. Most of the people seem to be living in semi-temporary dwelling units. The houses tend to be constructed of poorly made adobe, wood, and some concrete blocks. They have tiny, poor-quality structures. Sanitation facilities are rudimentary, with outhouses being the primary means of disposing of human waste.

The home to be constructed are two-bedroom houses corresponding closely to the URBE 4 and 5 solutions. However, the actual type of structure has nost been decided upon and will depend to some extent on what individual loan recipients are able to pay.

Socioeconomic Aspects. The average age of household heads is 32 years, the modal category being 25-29 years (50% of the household heads). The range is from 20 to 44 years of age. Seventy-nine percent of the loan applicants are male heads of household. Households are large, with an average of six members.

In general, this group is poor. Seventy-one percent of the household heads are blue-collar workers. Fourteen percent are independently employed, but the remainder would be subject to direct discount from paychecks to secure repayment of its loan.

Incomes are low, the average income of household heads being $212 per month, which falls within the 20-30th percentile range. This is also the modal category (43% of household heads). Total household income is not much greater: an average of $225 per month, also within the 20-30th percentile range. The modal category, however, is the 30-40th percentile range containing 43% of the population.

Financial Aspects. Since the actual house design has not been chosen, it is not possible to estimate loan amounts. However, preliminary estimates are that the houses will cost about $4,500 each. The cost may be reduced in some cases if owners assist with construction.

Conclusions and Comments. The prospective occupants of El Forestal are enthusiastic and anxious for the project to begin, though somewhat discouraged over the fact it has been promised for so long. Most of the households have been waiting at least a year to receive loan money for house construction.

This delay seems to have come about as a result of the requirement of the Housing Investment Guaranty program that loans be secured through a land mortgage. The problem with El Forestal is that everyone has derechos de posesion (rights of possession to the land). But it is very difficult to obtain the land title itself, because of the lengthy bureaucratic process involved. This process has been going on for a year now; and although everyone seems to be very understanding --or resigned-- each wishes the delays to end soon.

MIVI officials indicated that title acquisition is the one serious problem they have with this project. The requirement that land titles be physically in hand is apparently one that is more difficult to meet when houses are to be built on scattered individual lots. MIVI officials suggested that perhaps this requirement could be modified so that the derechos de posesion would be recognized.

El Forestal project recognizes that some households have their own lots but need loan money to construct an adequate house. Home improvement loans are inappropriate because no structure exists to be completed. What is needed is the replacement of housing that is entirely inadequate.

The level of infrastructure services to be provided to these scattered lots remains unclear. The administrative problems raised by the need to plan collections under these circumstances have not been confronted by MIVI elsewhere within the URBE Project area. However, they appear to have been managed successfully under the HG-011 program in urban Panama.

(a) Province of Cocle

Cocle is the province to the east of Veraguas and adjacent to Panama. In recent decades it has experienced a substantial out-migration to the metropolis. However, it possesses a rich industrial agriculture in its western region, including sugar, rice milling, shrimp farming and commercial tomato production. Dairy farming is also a substantial enterprise. From these resources, the province derives a level of household income which is second only to Chiriqui.

The capital of the province is Penonome, a designated URBE service center. The province contains a secondary service center in the industrial town of Aguadulce, which has access to a seaport through which most of Panama's agricultural chemicals are received. Aguadulce is the site of two major fertilizer plants.

(1) Town of Nata

Nata lies midway between Penonome and Aguadulce. It is a market town serving the agro-industries of the area. Like Aguadulce and Penonome, it is

located on the Pan-American Highway. Nata is the site of a proposed URBE-supported housing project.

(i) Nata (Planning stage).

This project consists of 35 houses to be constructed on dispersed lots already possessed by the applicants. In this respect, it resembles El Forestal. The project is in an early stage of planning. Applicants have not been selected and the feasibility study is not far advanced.

Physical Aspects. The 35 houses will consist of two bedrooms each, and will be constructed with an area of 40.1 square meters. They will be served by water and will have bathing facilities. Human waste will be disposed of by latrine. The model house is based on URBE 5, and is expected to cost $4,114. A total of $144,000 has been budgeted for this project of which the USAID contribution is $115,200 (80%).

There are no socioeconomic data available from this project at the present time. The MIVI annual report for 1982 states that 12 of the total of 35 lots are in process of measurement and legalization. The remaining 23 are yet to be located. A note appended to the report states that, "the lack of localization of the remaining lots within the plan of the city and the listing of the beneficiaries has prevented the delivery of the feasibility study to USAID." Approval by the agency will be required.

Financial data are also lacking. However, since the price of this project appears to be comparable to El Forestal, costs will probably be similar. Neither project has reached a state of advancement where costs to residents have been determined. There are no data on amenities to be provided and since the lots are scattered, these may depend on the individual location of each of them.

Conclusions and Comments. Nata was neither a growth nor a service center in the original URBE design. However, it is a center for the concentration of agro-industry. The Nestle plant for producing tomato sauces, a COAGRO rice mill and smaller enterprises are within the community. Providing housing for technical and skilled workers employed in these activities would support the URBE concept.

Since the residents have not yet been selected, the degree of conformity with the URBE design cannot be determined. The lack of a group identity in Nata, as in El Forestal, may produce administrative problems as yet unanticipated. The requirement that land titles be obtained by residents is apparently contributing to delay in completion of the ante-proyecto here as in El Forestal.

(d) Province of Los Santos

Los Santos is separated from Cocle to the north by the intervening province of Herrera. Los Santos has the dubious distinction of being the only province in Panama to experience a net population loss between 1970-1980. It was a primary source of migrants to the new farming frontier in Darien. Its

mean household income is among the lowest in the country. Los Santos has vast stretches of semiarid farm land, well-suited to orchard crops. Experiments with natural fruit production and processing intended to revive the farm economy are now in progress.

(1) City of Los Santos

The capital of Los Santos province is the interior city of Las Tablas. The city of Los Santos is at the northern edge of the province where it is a portion of the common Chitre-Los Santos metropolitan area. Chitre-Los Santos, in the original URBE design was designated as a growth center of the same status as David in Chiriqui. Each city was expected to serve as a commercial-administrative module for a vast hinter land containing several provinces. Subsidiary communities (service centers) were to distribute the goods and services originating in the two growth centers.

The concentration of housing projects in David validates its status as a growth center. In Table 3, it is clear that Chitre-Los Santos, programmed to receive 466 shelter solutions (all houses), was originally intended to be the "second city" in the URBE design. However, the distribution now taking place will provide only 40 solutions to Chitre-Los Santos in the project known as La Villa.

(i) La Villa (Planning stage)

During 1983, MIVI has affirmed its intention to construct in the La Villa project 27 homes of a total of 40 which will be ultimately provided. The construction will make place upon a single site located to the north of the city, separated by several kilometers from the densely populated perimeter. The site is adjacent to the plant of the Compañia Panameña de Alimentos, an animal feed mill.

Physical Aspects. The 27 units for 1973 are designated as "multiple use" structures, with an area of 56 square meters, with electrical and sanitary outlets provided at floor level. The services include a water supply and sewer system. The architect's drawing for this project discloses an open enclosed area (undivided into rooms), with a full bathroom located near the back door and a wash stand at the rear of the structure. Each solution is budgeted for $6,300. The total cost of the project is programmed at $170,100, of which $136,100 will be provided by the USAID agreement.

Financial Aspects. No figures are available on anticipated payments for this project, although the cost per unit is near the upper end of the scale for URBE-sponsored housing.

Conclusions and Comments. This project will be aimed at a resident population similar to that of San Martin de Porres in Santiago or Paraiso in David: the technical and white collar middle class households with incomes near (or above) the median for the URBE project area. Since Chitre-Los Santos contains a large concentration of government offices, there should be a high level of demand for these units.

Several questions remain. Why was the original program intended to provide 466 solutions to Chitre-Los Santos drastically reduced to less than 10% of that figure? The intent, according to the reprogramming document for the home improvement program, is to substitute 331 materials loans in Chitre and another 91 in Los Santos.

This plan will provide a total of 462 solutions--close to the original number. However, home improvement loans with a maximum value of $3,000 and an average of $1,800 will serve neither the same purpose nor the same income level as the URBE 3, 4 and 6 solutions first proposed in 1978 at much higher cost.

A final question pertains to the time schedule. The MIVI 1982 annual report predicts that both La Villa and Nata can be completed within the present year. By the end of March, the status of these projects appears to be unchanged. It is unclear whether this implies the existence of factors causing greater delays than anticipated, or whether it reflects a shift in emphasis toward the home improvement loan program. Materials loans appear to be moving forward at full speed in all areas.

2. Project URBE home improvement loans

The URBE housing program administered by MIVI during the first year following the release of funds in August, 1981, adhered rather closely to the 1978 project design. The terms of this design, and the construction proposed by it, were set forth in Tables 1 through 6 above. As noted in Table 7 and accompanying discussion, these plans were set aside at the end of 1982 and replaced with the Programa de Mejoramiento Habitacional (Home Improvement Loan Program).

The original URBE proposal called for only 200 home improvement loans, costing 3% of the housing budget. The present plan envisions 2,400 of these solutions, consuming 63% of the total amount available (see Table 8 above). Of the $5,400,00 from USAID in the HIG fund, $3,456,000 (64%) is now programmed for home improvement loans; $1,943,700 (36%) remains for the housing construction and site-and-services preparation prescribed in the previous section.

There were 1,585 housing units to be provided in the secondary growth and service centers chosen for Project URBE. This number is now reduced to 398 (excluding the 603 improved lots at Loma Colorada). There will be no new home construction or site planning for projects beyond that described in the preceding pages (see also Table 8).

USAID agreed in principal to this reprogramming, and in late 1982 the Ministry of Housing prepared an implementation document for the reprogramming of Loan 525-HG-010. This document laid out how funds would be distributed throughout western Panama and what the administrative procedures within MIVI would be for selecting loan candidates, disbursing construction materials to recipients, and handling the financial aspects of the loans.

Because this program is relatively new and the administrative apparatus is just beginning to be placed in operation, most of the information presented

below comes either from the implementation document prepared by MIVI or from interviews with personnel at the Ministry of Housing in Panama City and in the district offices.

(a) Distribution of solutions

Of the total $4,320,000 from Project URBE which is being reprogrammed for home improvement loans, plans call for approximately 54% to be disbursed in 1983 and the remainder in 1984. Loans funded through Project URBE are to go to residents in nine cities located in five western districts of Panama. These are the same cities named in the original implementation document for URBE:

District	City	Number of Loans
Chiriqui	David	974
	Concepcion	169
	Puerto Armuelles	161
Veraguas	Santiago	347
Herrera	Chitre	331
Los Santos	Los Santos	91
	Las Tablas	69
Cocle	Aguadulce	138
	Penonome	120
	Total	2,400

Given the number of solutions, the average loan will be $1,800. This is higher than the average $1,500 loan provided to the residents of Panama under the HG-011 program which foreshadowed the shift to this type of assistance.

(b) Administration of program

Because of the size and nature of the home improvement loan program which encompasses more than just the remaining URBE funds, the decision was reached to administer it from MIVI headquarters in Panama City. Moreover, in order to coordinate the administration of the loans, the Ministry of Housing has set up a new Office of Home Improvement Loans to direct the entire operation. The office will handle the selection of candidates for loans, the disbursement of materials, and the financial arrangements for loan repayment. All this will be done outside the channels which MIVI set up to operate the original URBE program.

(1) Selection of candidates

The home improvement loans are designated for households whose income falls below the estimated 1982 median income figure of $307 per month. Taking inflation into account, MIVI and AID have agreed that the 1983 median should be approximately $330 per month.

(i) The priority system

Originally, the Ministry of Housing wished to have no other constraints on the disbursement of funds, but at AID's insistence, MIVI set up a priority system which specifies the order in which different categories of construction will be funded through home improvement loans. The priorities are as follows:

Priority	Type of Home Improvement
First	Housing for those hwo have suffered from a disaster, such as a fire or flood.
Second	Improvements in a home's sanitary facilities, such as the addition of water, sewers, or latrines.
Third	Improvements in the structural integrity of a home.
Fourth	Completion of a house that is structurally sound but lacks a significant part, such as a wall or roof.
Fifth	Increasing the size of a home which has at least two persons per room and less than 5 square meters per person.
Sixth	Improvements, funded through a package of home improvement loans, that will have a positive impact on a community.
Seventh	Increasing the security of a home by building a fence or retaining wall.

Within the priority system individuals who have previously received assistance from MIVI will not have priority in any category.

(ii) Procedures

The procedure for securing a home improvement loan is as follows:

First, the applicant visits the social work department of the MIVI district office and fills out a request for a loan. In addition to providing socioeconomic data he must outline the desired home improvement and estimate its cost. A social worker and an inspector (a technician, architect, or engineer) then make a visit to the home and prepare a recommendation on the basis of their visit. The visit is to verify both the socioeconomic data and the need for the improvement requested.

Next, the applicant's file is sent to an analyst, who confirms the final cost estimate and determines an acceptable repayment schedule. Finally, the request is sent to a credit committee at the district office which makes a final decision in conjunction with the district director, the analysit, and the social worker. If the applicant is approved for a loan, the necessary construction materials are ordered through MIVI headquarters in Panama City and subsequently delivered to the district office.

Officials at the Ministry of Housing say that it should take about two weeks to approve a loan and have the materials ordered from Panama. Our observation was that it took from one to three months from the time MIVI was first contacted to the time construction materials reached the district warehouse. Paperwork at the district and national offices takes some time, but the manner in which materials are obtained is probably the main contributor to the time lag.

(2) Acquisition and disbursement of materials

The Ministry of Housing has insisted from the beginning that home improvement loans be in materials rather than in funds. Officials feel that recipients are likely to spend loan money on something other than the purpose for which it was intended. Also, officials argue, by purchasing materials in bulk, MIVI can provide construction supplies at a discount in 10-15% below prices at local building supply companies.

The acquisition and disbursement of materials occurs in the following manner:

Once a month --and one month prior to the actual disbursement of materials-- MIVI's Office of Home Improvement Loans receives a list from each district office of the construction materials it needs for newly approved loans. At the Ministry of Housing headquarters in mid-February, notifications were coming in concerning materials to be disbursed in late March or early April for April loans. The central office then compiles a comprehensive list of the materials needed --how much concrete, steel, roofing material, etc.-- and makes a purchase on bid from suppliers around the country. Successful bids ususally come from Panama City. The process of materials acquisition is apparently the major delay in loan recipients experience. The usual time lapse between loan approvals and availability of materials to individuals seems to be about four to six weeks.

At the beginning of the designated month, the materials are trucked from Panama City to warehouses at the district offices, where they are deposited for loan recipients. According to MIVI's implementation document, individuals have one month in which to pick up the materials from their loan. Officials in Panama City explained that recipients are given a coupon book in which their materials are described, and in which disbursements are recorded as they occur.

Disbursement of materials from the district office vary somewhat from the stated procedure. At one office, borrowers received at most two weeks in which to pick up their materials. District personnel at this office stated that the warehouse was not large enough to allow people to have materials stored there for a longer time. At another district office, whose warehouse is even less adequate, when the truck from Panama City arrives with materials, they deliver them directly to the homes of recipients. Afterwards, materials belonging to people who were not at home are stored in the small warehouse. Borrowers are notified that they can come for their materials. If materials have not been claimed by a designated date, they are distributed to others.

(3) Financial arrangements

Loans are to be for no more than $3,000 for periods of 5, 7.5, or 10 years. Officials at MIVI headquarters said that, to date, most loans are falling within the $1,500 - $1,700 range, which is the approximate cost of materials to build a "core unit" --a one room, 36-square-meter house with concrete floor, metal roof, and concrete block sides. This, apparently, is what MIVI recommends for people living in temporary quarters but who have access to land upon which they can build.

The payment schedule for home improvement loans is reproduced below as Table 13. The table indicates that payments for a $1,500 loan will fall between $35.66 and $23.10 per month. The actual payment depends on whether the term of the loan is five or ten years. If the applicant chooses 7.5 years as the term, then his payment becomes $27.18.

TABLE 13

Monthly Payments at 12% Interest for Home Improvement Loans

Maximun Amount of Loan	Monthly Payment	Social Security	Monthly Total
Term of 5 Years			
100.00	2.31	.07	2.38
500.00	11.56	.33	11.89
1,000.00	23.12	.65	23.77
1,500.00	34.68	.98	35.66
2,000.00	46.24	1.30	47.54
2,500.00	57.79	1.63	59.42
3,000.00	69.35	1.95	71.30
Term of 7.5 Years			
100.00	1.75	.07	1.82
500.00	8.73	.33	9.06
1,000.00	17.97	.65	18.12
1,500.00	26.20	.98	27.18
2,000.00	34.93	1.30	36.23
2,500.00	43.66	1.63	45.29
3,000.00	52.40	1.95	54.35
Term of 10 Years			
100.00	1.47	.07	1.54
500.00	7.37	.33	7.70
1,000.00	14.75	.65	15.40
1,500.00	22.12	.98	23.10
2,000.00	29.50	1.30	30.80
2,500.00	36.87	1.63	38.50
3,000.00	44.25	1.95	46.20

A factor not considered in providing this form of support is that no services or amenities are included. Even at Loma Colorada, piped water is available at each homesite. For home improvement loan recipients, water, sewer service, electricity and site preparation (leveling and drainage, for example) are all "extras." Purchase of these will greatly inflate monthly expenses.

The problem could loom larger if a number of applicants for these loans are using them to construct the "core units" described above. These must be considered as essentially new houses, not as "improvements." Such construction does not come under any of the seven priorities described above, although it could represent the major purpose for which funds are being requested.

If a substantial number of home improvement loans are being used for new construction of unserviced units, MIVI and USAID could be accused of financing substandard housing and creating hazards which might endanger the health of both the occupants and their neighbors. This hypothesis cannot be confirmed without a detailed study of the purposes for which loans are being provided.

Problems with collections on these home improvement loans can be anticipated. MIVI has worked with organized groups where the houses are all located on a single site. This loan program requires the Ministry of Housing to deal with people scattered throughout the western region of Panama.

MIVI has already had trouble with record keeping on loan repayments, which is why the program will be administered from a single office. The trouble originated with households who obtained home improvement loans and were already participating in one of MIVI's housing projects and so carried a mortgage as well. Sometimes, at MIVI's Office of Collections, note payments were applied instead toward their mortgage payments. Notes were then listed as delinquent when, in fact, they were not. MIVI officials believe that some people will always carry more than one type of loan through the Ministry of Housing.

Now, the Office of Home Improvement Loans acts as a centralized collection agent for the loans it approves. It gathers all the payments together and delivers them once a month to the central collections office. The loans are handled as a single account by that office. Otherwise, the office of collections would eventually be managing over 2,000 individual accounts for very small loans. To aid in the collection of these loans, MIVI has decided that 95% of home improvement loan recipients should receive paychecks from which payments can be directly discounted.

(4) Characteristics of loan recipients

While the program is incipient rather than fully established, some early home improvement loans have already been awarded in the URBE area. Interviews at provincial offices disclosed that 74 awards have been made in Cocle, 80 in Herrera and 19 in Veraguas. Locating the records on recipients was more difficult than for home loan projects. However, the entire set for Veraguas was found in the provincial MIVI Office at Santiago. The description to follow is based on these cases.

Demographically, this population is composed of households not unlike those involved in other aspects of the URBE program. The average age of household heads is 34 years. Average household size is five members, that being the modal size (26% of the households) as well. The range is from three to eight individuals, with the larger households mostly extended. Sixty-three percent of the loan applicants are males.

Economically, these households fall into the lower income categories. Sixty-three percent of the household heads are blue-collar workers, and 16% are independent workers who do not earn paychecks from which payments could be deducted. No household has more than one worker, suggesting that the population as a whole has few second workers. Averaging $206 per month, the incomes of household heads are generally within the 20-30th percentile group. This is also the average figure for total household income, since there are no second workers.

Conclusions and Comments. The considerations represented by the shift to the home improvement loan program have little or nothing to do with Project URBE. They are an extension of the policy developing within the Ministry of Housing for providing shelter solutions outside Panama. Over the past several years, this policy has shifted unmistakably away from comprehensive multi-dimensional housing projects (requiring construction of streets, land preparation, installation of utilities, provision of human services, etc.). It is moving toward the one-dimensional substitute of home improvement loans provided to persons on scattered individual lots, each of whom will be responsible for his own construction, amenities, and essential services.

Behind this lies a series of frustations which came to light as a background to interviews with MIVI officials, particularly in the provincial offices:

1. Substantial delays have been encountered in securing land titles required for the provision of home construction.

2. Once titles are secured, the groups petitioning for the housing must reach agreement on contributions of cash, materials or labor.

3. Where contractors are involved, disbursements by MIVI are seldom made on schedule. Laborers go unpaid and walk off the job. To prevent this, contractors frequently schedule other jobs simultaneously in order to keep work crews together.

4. In housing projects, interagency agreements must be concluded with the Ministry of Public Works (MOP), the National Water and Sewer Institute (IDAAN), and the Institute for Hydroelectric Resources and Energy (IRHE).

By moving toward home improvement loans, the Ministry of Housing moves toward autonomy. The desire for separate control of its own domain has been evident in the role assumed by MIVI in other projects in earlier years.

Another consequence of the move toward home improvement loans is the substitution of the lower income household for the organized group as the unit being served. This virtually powerless entity is in no position to bargain or negotiate for the services being received. Once again, control is maximized by the policy change which eliminates housing and substitutes materials.

There is also a loss incurred, however. The problems arising in the planning stage at El Forestal and Nata should alert the Ministry to the difficulties inherent in administering a large number of small, scattered loans. It is much easier to deal with a small number of larger loans, concentrated in a specific area.

To simplify some of the potential pitfalls, it was implied that the Ministry will set the level of direct discount loans (providing the opportunity to deduct payments form paychecks) at 95% of the total. However, the delinquency levels experienced elsewhere indicate that this is not a cure. One of our inquiries revealed that the government itself had fallen behind in issuing paychecks, and was the party responsible for the deficits in the payment schedule.

While it could be argued that the move toward home improvement loans is expedient for the Ministry, the rationale is in terms of basic human needs. Improvement loans reach further down to lower socioeconomic status households, according to this argument. By reducing the average size of the loan, funds can be distributed much more widely to a greater beneficiary population.

B. Institution Building Achieved

The institution building intentions of Project URBE were to be achieved through the utilization of technical assistance to build management capacity at the same time as the advance of construction made effective management necessary. A key idea behind the URBE concept was that the components to be managed (housing projects) and the institution responsible for management (MIVI) could be developed in parallel through the appropriate mix of technical assistance and guidance from USAID personnel.

But, of the total amount of $424,000 budgeted for this purpose, only $55,500 had been delivered prior to April, 1983. This amount was expended to retain two consultants for periods of approximately six months each. One appointment was for advice on financial management within the Banco Hipotecario Nacional; the second was for housing program development within the Ministry.

The Project Paper assigned the highest priority for institution building to the development of an information system to deal with data processing and analysis. A data processing consultant was retained, although not with URBE finances, in September, 1982. His report includes a comprehensive description of data processing within MIVI as of that date.

The following excerpts are from E. S. Popko, "A Framework for Management Information Systems at the Ministry of Housing, Panama:"

"Within the past year, MIVI has installed an IBM 34 mini-computer, created a data processing department, hired several systems and applications programmers, and computerized several important manual procedures...

With the exception of accounting and engineering departments, most users within MIVI are poorly prepared to make use of computer technology...

MIVI's original data processing applications were mortgage accounting and budget preparation...

But today data processing should be serving a much broader community and applications should cut across all divisions and departments. For example, client applications for housing start off in the Division de Planificacion (Direccion de Asuntos Sociales). Demand reflected there sets design and building standards in the Direccion de Desarrollo Urbano (Departamento de Programacion y Formulacion de Proyectos) and end up in the Division de Finanzas (Bienes Raices)."

Our inquiries verified that computer applications are still restricted to the last of these departments (Bienes Raices), where the most important use is the monthly report of loan repayments. These payment schedules are tabulated by each housing project reported above. Accounting consists of a montly match of the amounts due and payable by project with the amounts actually collected.

The URBE evaluation team made an independent assessment of the needs and potential for data processing within MIVI. Our conclusions are identical with the two highest priority needs described by consultant Popko, who affirms the following (p. 8):

"MIVI should give the highest priority to the automation of client housing systems...

Asuntos Sociales will need software support to measure housing demand from client applications and to analyze its socioeconomic surveys. MIVI does not have sufficient statistical software to do this...

The home improvement loans program is creating additional pressures to complete the automation of the mortgage accounting system. The client interviewing, field checks, and loan repayment practices are very similar for the two systems. MIVI should expedite these applications as soon as possible."

Two pages from consultant Popko's report (pp. 16-17) provide very lucid insights into both the status of institution building within MIVI at the present time, and also the priority requirements for the future. His statement, entitled "Priority Computer Applications at MIVI" is reproduced in full below:

PRIORITY COMPUTER APPLICATIONS AT MIVI

Social Affairs Office

Among other duties, the Office of Social Affairs is charged with the processing of all MIVI housing applications, characterizing demand, and reporting client accommodation to MIVI projects. Approximately 1,600 to 2,000 applications are received each month in the Panama City and Colon offices (MIVI/4,5). The applications are reviewed and authenticated by 17 social workers. The procedures are well established, highly repetitive, and require careful attention to detail.

Social Affairs prepares a project-by-project analysis of the effective housing demand. The Social Affairs Department also makes the final selection of clients based on criteria of eligibility, age of application, and availability of housing that meets client's preference. In practice, however, the Ministry has not coordinated project design with client demand, and families tend to be assigned to solutions according to their ability to pay rather than other criteria such as access to work, preservation of community (in renewal projects), or family life cycle needs.

Obviously, the significant number of applications alone makes this a very high priority application for computerization. Client applications serve an additional purpose within MIVI. MIVI's current practice is to create a preliminary project design. The focus tends to be site planning, construction, and dwelling unit design if the project is not a sites-and-services project. The designers manipulate the spatial allocation of land, the quantity, and the specifications for infrastructure according to code requirements and local construction practice. Once the design is committed, a quanity survey is done to determine each component's cost. These costs become the basis for determining the final price applicants will pay.

MIVI has several choices prior to occupation, if project prices exceed what families can afford to pay (and they often do). They can: (1) subsidize cost items, (2) defer capital programs, (3) readjust the design or (4) offer the project to a higher income group. The general practice has been to do some combination of all four.

The Social Affairs Group is attempting to influence project planning by making design and engineering more affordable to their client base. This requires timely analysis of client applications and a systematic matching of clients with completed solutions. The processes they envision would reverse the current design practice. Design would begin by analyzing demand and considering the family's alternatives in the overall housing system -- slums included. The new approach is market oriented. Architectural and engineering design would essentially manipulate the amount of constructed area and infrastructure to balance prices with the Ministry's costs. The essential difference in the Ministry's current approach and the proposed one is that the latter constrains design to a known client group, but this will require accurate

and timely analysis of client's records to make it work.

Home Improvement Loan Program

With financial support from AID, MIVI has reintroduced a program of home improvement loans (MIVI/7). Clients apply for loans (MIVI/3) by submitting a financial qualification and needs statement at one of MIVI's offices. Upon verification and inspection of needs, the client can qualify for up to $3,000 worth of basic materials like wood, cement, zinc, blocks and reinforcing steel. Clients are expected to transport the material from MIVI's central warehouses to the construction site.

MIVI's policy is to recover client loans through payroll deductions (descuento directo) of monthly payments for 1 to 10 years at 10% interest. An additional 2% is added to the interest rate to recover administrative expenses. All loans are constant payment and fixed interest. Although the program has been implemented less than one year, about 600-800 loans have been made and a significant increase is expected next year.

The Direccion de Bienes Raices has developed an accounts receivable system for payroll deduction, collection of deposits, review of arrears and account registry (MIVI/2). The system generally follows the same information flow, auditing, and archive practice of the conventional mortgage system. Automation of the home improvement loans program is an absolute necessity if the program is to continue. Three systems will be required: (1) client application, (2) order/inventory of the materials at MIVI's central warehouse, and (3) accounts receivable.

The materials application procedure is very similar to standard mortgages. MIVI should consider combining the automation of materials loans with their conventional housing loans.

Operationally, both loan systems have similar. Both must determine client need, conduct field checks, etc. Both systems require similar loan payment reporting. It is likely that much of the systems work for these two applications can be combined, thus saving considerable DP resource. The current transaction rate of accounts receivable is approximately 35,000 this justifies a joint system's development programming and training effort.

Since the consultant report was completed, nothing has been done to implement its recommendations which include the following:

1. Form a Management Information System Group within MIVI to facilitate communication between divisions and departments. This should generate new perspectives on information flows, requirements and resources.

2. The next step is to design implementation procedures for accessing, storing, retrieving and delivering information originating in one unit to all others able to make use of it in the form suitable for each user.

3. The highest priority should be given to developing computer applications needed to manipulate the data in the Social Affairs Office and Home Improvement Loan Program.

4. There are substantial management and planning needs which are not being met by the present system which is useful primarily for day-to-day operations and low level routines (recording payments, computing the payroll, etc.).

5. An inventory of data presently at hand which would be useful for management purposes is needed, together with a suitable program package oriented toward management decisions rather than simple bookkeeping and accounting. Failury to development management applications deprives the user community of most of the potential of an automated data base.

These observations are just as valid today as they were six months ago, and the need for them is even more urgent.

The necessity for an information system has been repeatedly called to the attention of MIVI personnel since the years prior to the activation of the URBE Project. But the Ministry remains unaware of the difference between their present minimal uses of automated data processing for accounting purposes and the capability of an information system as a management tool.

Taking the next step would require substantially greater infusions of technical assistance than have occurred up to the present. It is unlikely that further institution-building will take place without it. Both non-use and misuse of technical assistance have been evident from the beginning of the URBE project in all components. Reasons for non-performance include all of the following:

1. The Ministry of Planning (MIPPE) has the responsibility to prepare and submit the comprehensive technical assistance requirements of MIVI along with other agencies for USAID approval. It has failed to do this.

2. Each ministry is required to develop a scope of work and preparation of contract for technical assistance following USAID approval. These have seldom been forthcoming.

3. In November, 1982, MIVI was authorized to separate $150,000 of technical assistance from MIPPE's budgetary control and negotiate independently for its expenditure with USAID.

   Contrary to expectations, this has produced no improvements in either the volume or the processing of technical assistance requests by the Housing Ministry.

As this is written, MIVI has once again been beseiged with supplications to produce a list of needed technical assistance. On March 22, a hastily prepared draft was delivered to the USAID offices. Its content was nothing more than a repetition of items which appear in the Project Paper of 1978. Estimated costs for these items were reduced to meet the $150,000 limit. Neither explanation nor justification for these items appeared. Nothing more clearly indicates the need for institution building support within MIVI than its inability to request it effectively.

C. Linkages Constructed

The linkages between institutions intended to result from the operation of Project URBE were to include preparation and use of physical plans for the URBE communities; once again, this activity was to be in collaboration with the Ministry of Planning. Another linkage expected was a connection between the construction activities of the Ministry and the stimulation of the private sector to provide additional low cost housing at commercial rates.

The delay in provision of HIG funds prevented effective cooperation from developing between MIVI and the Ministry of Planning and Economic policy (MIPPE) during the first two years of project activity on matters concerning housing. When funds became available in 1981, the relationship was out of phase with other URBE components.

While MIPPE attempted to assume budgetary responsibility for that portion of MIVI support falling under its control, this only comprehended the technical assistance package for housing in the URBE loan ($424,000). This substantial sum represented over 40% of the total technical assistance package made available to all components. With MIVI as with other agencies, MIPPE encountered contracting problems when delivery of technical assistance was attempted.

Another dimension of MIPPE-MIVI coordination pertains to the responsibility for urban planning. Guide plans outlining the total dimensions of urban growth were to be prepared by the Ministry of Planning and submitted to Municipal Councils for approval as law. Matching physical plans with implementation provisions (building codes, zoning of land uses, etc.) were to be prepared by the Ministry of Housing. These were also to be enacted as ordinances by the city governments.

While these plans were both enacted in two of the principal cities (David, Santiago) they have had a distinctly different fate. The physical plans (plans normativos) have been used for the purposes intended:

determining street widths, parking spaces, setbacks of buildings on frontage lots, and the like. The guide plans prepared by MIPPE have fallen into neglect.

Where the matters considered in the planos normativos require daily implementation in each city; the guide plan is concerned with more remote issues: direction of city growth, placement of public facilities, division of the community into functional use areas (commerce, industry, residential, etc.). The guide plan is subject to neglect because its implementation is not constantly required.

There is a qualitative difference as well. The subjects treated in the physical plans are rather narrowly defined engineering matters; but they are handled in a professional manner. The subjects considered in the guide plans are given more superficial coverage. They have the appearance of "exercises." None of them appear to have developed data independent of published sources, for example.

While useful, the planos normativos exist for several communities only. In these, however, they have made an impact. MIVI architects and engineers complained that their codes, norms and zoning regulations would have greater significance if they were more widely understood and their importance appreciated by municipal officials. The opinion of the technical capacity of municipal government was universally negative.

Once again, MIVI appears to be fulfilling a valuable function where its planning goals have been realized. But also once again, it appears to be "going it alone." There was no evidence of any attempt between the two agencies, MIPPE and MIVI, to coordinate their efforts in those cities where both plans had been completed.

Concerning the third linkages with the local construction industry, the results have been mixed. In the design of the early housing projects, local contractors and construction workers have been utilized in significant numbers. The following observations are based on statements from Ministry personnel and serveral local contractors:

1. For each $3,000 expended on housing, MIVI hired one full-time employee to perform the labor required. Thus, on the average, one local workman (usually a mason or apprentice) was employed for each house. Masonry work required takes approximately one month.

2. In some cases, MIVI contracts for construction at a fixed price of $350-400 per house. The Ministry provides the materials and the owners are expected to contribute unskilled labor.

3. One contractor building seven houses at Paraiso estimated that he needed seven man-months per house including specialties: plumber, electrician and masons.

The third case above is closer to the type of linkage to the local construction industry envisioned by the Project URBE designers. Reports from

informed participants in the house construction activities funded by MIVI were frequently negative. The major complaint was that disbursement of payments from MIVI was late and payments to workers could not be made on time. Construction was frequently interrupted as contractors left MIVI projects for other jobs in order to keep their workmen together.

Whether local construction enterprises will learn that they can make money on low cost housing from their experience with MIVI is an unresolved issue. There were expressions of dissatisfaction with MIVI by local businessmen, and also with owners of lots who were constructing homes on a pay-as-you-go basis. The latter home-builders were taking as much as four years to complete their units because of their inability to accumulate sufficient savings.

Concerning further encouragement of private construction projects, despite the supposed demonstration that building housing for lower and middle income groups is a feasible and potentially profitable undertaking, the private sector shows no signs of entering the market. Private construction projects exist, but the housing they provide costs two, three, and four times what MIVI's housing costs. The reason for this price differential relates to the fact that privately built houses are more finished. They have such amenities as glass windows with screens and full baths. None of these are included in MIVI's construction. However, once these features are put into housing in Panama, the houses are clearly out of the range of people even at the 50th percentile. It appears that only people in the top three deciles can afford finished housing.

The gap that exists between the market for shelter solutions of the type provided by the Ministry of Housing and the private market is substantial. Informants within the URBE communities stated that mortgage money was available at 12% from the Cajas de Ahorro (savings banks) with loans to be repaid in ten years. However, it was estimated that an income of at lest $600 per month per household was required to qualify for this financing.

Meanwhile, MIVI is moving away from its earlier commitment to packaging house-and-lot shelter solution for the lower end of the household income distribution. The replacement of the URBE housing program with the Home Improvement Loan aternative has far different implications. There will be no further construction contracts to local suppliers. The loan provides for materials but includes nothing for labor.

Throughout the past two years of MIVI experience with Project URBE, the movement has been away from the original objectives regarding linkage with the other Ministries within the GOP, and also linkage with the private sector construction industry. At this point relationships of the sort intended are minimal or non-existent.

V. The URBE Housing Component: The Implications of Policy Reversal

A. The Policy Reversed: From URBE in 1978 to HIL in 1982

The purpose of the URBE housing component was to provide middle income households with serviced house-and-lot dwelling units. Almost three-fourths (71.9%) of the budget was to be spent on solutions designated as URBE 4-6 (completed houses). Approximately 45% of the HIG funds ($2,774,200) were to be spent on households within the 5th decile (40-49%) of household income. The intent of the program in 1978 was to retain administrative, technical and professional households within the URBE area by providing a standard of living high enough to prevent them from migrating to Panama.

Following the announcement of the Home Improvement Program in late 1982, however, the original program appears to be standing on its head. Almost three-fourths (71.3%) of the budget will now be spent on URBE 1-3 solutions (serviced sites and home improvement loans). There has been an equally dramatic shift in the household income composition of the beneficiary group.

The degree of deviation from the original intent in the construction program is set forth in Table 14 below:

TABLE 14

Changing Distribution of Shelter Solutions within the URBE Area: From 1978 URBE Project Design to 1982 Home Improvement

Type of Solution 1978 Project URBE	Number	%	Type of Solution 1982 HIL Program	Number	%
Home improvement loans URBE 2	200	9	URBE 2	2,400	71
Lots with services URBE 1, 3	820	38	URBE 1, 3	603	18
Housing (core units) URBE 4, 5	430	20	URBE 4, 5	228	7
Housing (completed home) URBE 6	736	34	URBE 6	170	4
TOTAL	2,186	100		3,401	100

The shift in the last category (the complete home) is perhaps the most significant in the context of Project URBE. This corresponds to URBE 6, which was supposed to service the 40-50th percentile income group, composed of trained technical and semi-professional people, and was intended to help retain them in the western region.

Using the revised decile income distribution constructed in Table 10 above, the shift in income levels to be served by the URBE housing component in its 1982 format is illustrated in Table 15 below:

TABLE 15

Changing Distribution of Income Groups served within the URBE AREA: From 1978 URBE Project Design to 1982 Home Improvement Loan Program

Decile of Household Income	1978 URBE Project				1982 HIL Program*			
	Housing Solutions	%	Other Solutions	%	Housing Solutions	%	Other Solutions	%
0- 9% ($000-114)	-	-	-	-	2	-	12	11
10-19 ($115-179)	-	-	650	63	9	6	28	25
20-29 ($180-229)	250	21	220	22	18	11	26	23
30-39 ($230-279)	360	31	150	15	34	21	19	17
40-49 ($280-330)	556	48	-	-	46	28	11	10
50 ($331)	-	-	-	-	56	34	16	14
TOTALS	1,166	100	1,020	100	165	100	112	100

* Based on detailed income data form the following projects: Loma Colorada (94), Mi Dulce Hogar (49), Juan XXIII (45), San Martin de Porres (44), Nata (13), El Forestal (14), Home Improvement Loans (19). No detailed data were available for Paraiso, Solano or La Villa.

The presentation above is unbalanced. It compares the intended distribution of solutions in 1978 with the actual distribution thus far under the HIL Program of 1982. However, since target deciles for the HIL Program remain unspecified, there is no better alternative. While the results (as always) must be considered tentative and preliminary, they contain some surprising indications, which may be itemized as follows:

1. Where 52% of housing solutions were intended for households between the 20th and 39 percentile, only 32% of houses constructed have been delivered to them.

2. Where 48% of housing solutions were intendeded for households between the 40th and 49th percentiles, only 28% of houses constructed have been delivered to them.

3. More than one-third (34%) of the houses constructed to date have been delivered to households earning more than the median designated for the URBE project area.

4. Where 63% of serviced sites and home improvement loans were intended for households falling below the 20th percentile, only 36% such solutions have been delivered to them.

5. Where no serviced sites and home improvement loans were intended for households above the 40th percentile, thus far 24% of these solutions have been delivered to them.

6. The proportion of serviced sites and home improvement loans intended for households between the 20th and 39th percentile (37%) is approximately what they have received to the present time (40%).

Households with income falling below the median determined for the URBE Project area ($330 per month) have been shortchanged on the proportion of housing constructed and delivered to them. Those who have gained by this redistribution are the technically ineligible households whose incomes are above the median. Essentially the same phenomenon has occurred in the case of serviced sites and home improvement loans. Households below the 20th percentile have been deprived of their intended share, while households above the 40th percentile have benefited from the redistribution.

The impression prevails among both MIVI and USAID personnel that the Home Improvement Loan Program provides more benefits to low income households than any plan preceding it. It is justified as an extension of both MIVI philosophy, which seeks to over-represent households below the 35th percentile among the recipients of its solutions, and the U.S. Government's goals for the Housing Investment Guaranty Program which are essentially the same.

The HIL Program attempts to "downsize" the original URBE Project solutions. If $6,211,700 is taken as the total 1978 cost of the URBE housing program (including both USAID and GOP contributions), then $2,850 would be the average cost of 2,186 solutions planned. With the annual inflation rate estimated at 6%, that 1978 solution is worth $3,814 in 1983. However, the mean home improvement loan to be provided by the HIL Program is only $1,800, or less than half as much.

Has the "downsizing" of the solution also succeeded in "downscaling" the customers for the more economical package produced? Households below the 30th percentile of income are receiving 60% of the home improvement loans and serviced sites thus far delivered. This observation implies an affirmative reply. Yet, it it accompanied by the note that 24% of the loans and sites are awarded to households above the 40th percentile. This group is clearly over-represented.

More than two-fifths (41%) of <u>all</u> solutions (housing, serviced sites and home improvement loans) supported by Project URBE funding through the HIL Program have gone to ineligible household above the $330 per month median. It could be concluded that "downsizing" of solutions has been accompanied by "upscaling" the client population. In the future, as the number of home improvement loans increases while other solution categories recede and disappear, the income distribution of recipients must be closely monitored.

The future distribution of home improvement loans, compared with that given in Table 15 should probably be expected to creep upward. The data on which Table 15 is based are heavily weighted in favor of the sample of households obtained from <u>Loma Colorada</u>. As described in the text, this is an

extremely low income population of squatter households on the outskirts of David. Their average loan of $1,050 and monthly payments ($10-12 per month) are far below those for the average home improvement loan ($22 per month for $1,500 over ten years). A cross-section of loan applicants drawn from the Project URBE communities would almost certainly have a higher distribution of household incomes.

B. The Implications of Reversal: A New Recipient for a Different Service

There will be no new housing projects initiated in the Project URBE communities. As Table 1 confirms, all projects to be completed are already in the planning stage. The balance of the Ministry's work in URBE communities will be embodied in an accelerating number of home improvement loans. While perhaps not yet fully appreciated, this transition will change both the social definition of the recipient and also the nature of the service provided to him.

1. The shift from groups to individuals

In developing housing projects such as Paraiso or Juan XXIII, MIVI dealt directly with a tightly organized group such as a labor union or a cooperative. The group participated in the selection of beneficiaries. It provided land, or construction materials, or technical expertise. In these and other ways, it reduced the price of a particular solution to the future home owner.

A consequence of the group participation was that a portion of the cost was indirectly subsidized; in some cases, the group was also responsible for making collections, thus reducing risk of loss to the Ministry. Groups increased the value of the housing solution provided to the individual and reduced the burden of administration and supervision borne by the Ministry.

Home improvement loans are provided to individuals rather than groups. The cost-reduction factors are no longer present, either for the beneficiary or for the Ministry. The inevitable consequence is less house for the money, and quite possibly also, an increase in the cost of administration to MIVI.

2. The shift from homes to materials

The housing development required the purchase of services from local contractors. It subsidized the procurement of materials and labor within the community where construction was to take place. It also facilitated inter-agency working agreements between MIVI and IDAAN, MOP and IRHE (the ministries providing water, sewer systems, roads and electricity).

The home improvement loan program transports materials purchased in Panama to each community where a depósito is maintained. These materials are then delivered to the site by MIVI-operated trucks. Not even transportation is purchased locally. In the case of David, for example 516 loans at an average cost of $1,800 are to be made during 1983. If purchases were made locally as in the past, $928,000 would be pumped into the local economy. Throughout the Project URBE communities, $2.32 million will be spent during

1983. Under present arrangements, however, the economic impact of this expenditure will remain within Panama itself.

3. The shift from tracts to lots

The key feature in the development of a housing project was the procurement of a suitable tract of land. This has frequently been an obstacle to the advancement of construction because of squabbles over prices or difficulties in obtaining title. However, once secured, land preparation and installation of services could take place. In the case of Loma Colorada, the minimum solution, this involved little more than leveling, grading, carving out drainage and providing dirt roads. Later, a water system was also installed. However, the residents observe that the site does not become a sea of mud during the rainy season.

Other sites utilized for house construction have been completely urbanized. Increasing protests are being received from those projects which were not provided with adequate waste disposal systems. More can be expected in the future when months of continuous occupancy begin to add to the seriousness of the problem.

The home improvement loans are provided to lots which receive no services whatever. The MIVI regulations state that "they must have access to water", and nothing more. Loans are to be provided for securing water connections and constructing latrines; in fact, this sort of improvement receives a high priority under the program. However, loans may be made for a number of other purposes without necessarily including basic services: adding rooms, completing unfinished units, etc.

The individualized nature of the home improvement loan encourages diversity in the quality of housing "improved". It seems inevitable that a number of the shelters on which loan funds are expended will fall short of meeting minimum standards, especially in the area of environmental sanitation. Where IDAAN, MOP, and IRHE can be recruited to improve services to a tract of land, very little can be done with individual lots.

4. The shift from cooperative arrangements to independence

The trend for the Ministry under the home improvement loan program is one of rapid disengagement. In developing housing projects, it was necessary for MIVI officials to deal with other groups to which applicants belonged. It was necessary to negotiate with local contractors, building supply companies and construction workers. It was necessary to participate in planning combined operations with a number of other ministries.

With the shift to home improvement loans, none of these necessities prevail any longer. MIVI can go it alone. Those who have been in a position to observe the workings of the Ministry over the past decade do not believe that this is a coincidence. The Ministry has taken a number of opportunities to expand its autonomy, maximize its control over its operations, and affirm its independent course as a policy maker.

The decision to enact the Home Improvement Loan Program, for example, was made without consultation with other components of the URBE project. There appears to have been no dialogue with either the Ministry of Planning or with divisions of USAID other than the Regional Housing Office. Once approved, the need for MIVI to interact with other units of the government on matters concerned with the URBE communities disappeared completely.

C. Making the New System Work: Some Sources of Instability.

There seems to be little recognition and less concern on the part of MIVI administrators that the changeover from home construction to materials loans may have costs as well as benefits. Remarks were made that it would be better to convert the remaining housing projects in MIVI's portfolio to serviced sites coupled with home improvement loans. This would transfer the responsibility for construction completely to the individual home owner.

This type of observation may not reflect the level of consciousness present among more highly placed administrators within the system. However, it indicates a lack of awareness, at least among regional office personnel, of some of the potential sources of instability in the HIL Program. Some of the partially hidden pitfalls may emerge by briefly touching upon three issues which appear to have escaped discussion.

1. Responsibility for implementation

The household becomes the unit responsible for implementing the home improvement loan. No funds are provided for labor. No cooperative arrangements are negotiated. USAID housing personnel noted that in Panama home owners appeared to have resources sufficient to employ labor required for completion of core units when building materials were provided. Estimates given elsewhere indicate that $350-400 was required for this purpose.

To be eligible for a loan, it is necessary that the recipient have income. He must be employed. If employed, his time available for home-construction is minimal. Since it is an implicit rule that 95% of the HIL loans are to be given to persons with paychecks from which deductions can be made, the level of full time employment among beneficiaries will be higher than that for the country as a whole.

There is an implicit danger in this situation. The home owner is responsible for the rapid implementation of his construction following the delivery of materials. If he is not prompt, the materials will deteriorate. If he is fully employed his home construction activity will be a weekend enterprise and unavoidable delays will occur. If he is to utilize labor, he must have resources beyond those provided by the loan. If such resources were available, the loan itself might not have been necessary. The outlines of Catch-22 begin to take shape.

2. Affordability and the repayment issue

To gain perspective on the question of the capacity of households to afford the solutions provided, a comparison of income levels with payments

case, neither the affordability issue nor that of cost recovery appears to have been resolved in the HIL Program.

The underlying problem is that a direct measurement of finances available for shelter costs at different income levels in different communities has never been undertaken. The cost of shelter and related services to the population of Loma Colorada is unknown. The income distribution of the recipients of lots has not been calculated (although preliminary data for this purpose should be available). The relationship between income levels and services purchased is not established.

It is well known throughout Panama that piping water to an area and placement of sewer pipe in a subdivision does not guaranty use. The cost of connection to both systems must be paid by the individual household and delays of years are not infrequent. The individual household has made a decision that it cannot increase the proportion of its resources available for the purchase of shelter and amenities.

The prospects for a good repayment record on the HIL Program are diminished by the lack of a group context to provide for subsidies, supplementary financing and assistance with collection. It seems unlikely that this will be compensated by payroll deductions alone. A household socioeconomic survey to construct household budgets in the URBE communities is a top priority. As Table 16 confirms, a stratification pattern reflecting a wide range of median incomes already exists within the housing projects now in progress. It remains to collect and interpret the data.

3. Eligibility and the measurement of income

It may cause alarm to administrators when (and if) they discover that the income levels in two of the housing projects already funded (Table A16) are above the $330 median for 1983. In fact, as noted before, 41% of all solutions provided in URBE communities have been received by households earning more than the legal median determining eligibility.

Here, once again, we are dealing with an arbitrarily defined set of numbers. The eligibility table reproduced in the Home Improvement Loan program document of December, 1982, could not be substantiated from either census or sample survey data. It is established by negotiation between USAID and MIVI. It was suggested earlier that the amount appears to have been based on the 1975 national sample survey of 6,000 households, and incremented by a figure representing annual inflation since that date.

It appears to be time for another sample survey of household income. Neither the medians nor the deciles at this point have any firm anchor in reality. Consensus throughout the provinces was that the $330 figure was too low for the median income in secondary cities. However, this assumption is based primarily on data taken from loan applications. There is a substantial gap between households served by MIVI and those earning $600 per month or more who are served by private contractors. If this latter group were included to determine a correct income distribution for the entire community, there seems little doubt that the median household eligibility figure would rise substantially.

There is a pervasive tendency among institutions seeking to provide shelter solutions in developing countries to try to resolve issues by formula which can only be settled by fact. Responsibility for construction of homes with loan-purchased materials, affordability of solutions, and eligibility to receive them are all issues requiring collection of additional field data. A single household socioeconomic survey could resolve the entire set of questions.

C. Some Alternatives for the Home Improvement Loan Program

There has been substantial discussion within the Regional Housing Office concerning the possibility of modification within the MIVI Home Improvement Loan Program. Discussion revolves around the prospects for the substitution of cash for building materials. It has been pointed out repeatedly that programs based on cash grants have precedents in other countries. The frequently raised objection that cash-based loans are more subject to fraud or theft is not substantiated by experience with, for example, small loan programs elsewhere in Panama.

Conversion of the HIL program to a cash basis would imply a number of basic changes in both the administration of the program in Panama and in its impact at the field level. Each of these aspects will be discussed briefly below.

1. Administrative simplification

There is concern within USAID over the cost of administering the present MIVI home improvement loan program. Since no audit of these costs has been performed, the subject remains open to conjecture. However, the preceding chapters should have made clear that the present program contains substantial hidden subsidies. Some of them are not os well hidden.

The following cost items are not factored into the loan and are not paid by the recipient:

a. Transportation of materials from Panama to the local deposito, and frequently to the home site.

b. Maintenance of the deposito as a warehouse for unclaimed construction materials.

c. Procurement of materials through a complex process of soliciting orders, batching items and placement of bids with suppliers.

d. Construction assistance and advice provided at no cost to the recipient.

One possibility is to introduce an overhead item into the loan which would be discounted from the face amount to cover these costs by passing them along to the client.

But there is another possibility. If loans were made in cash to the client, he would be responsible for his own overhead costs. Rather, he would

pay them indirectly through slightly higher prices paid for building materials purchased from local commercial suppliers.

2. Stimulation of the construction industry

At this point, MIVI is in competition with local firms supplying construction materials, and the contest appears to be unequal. One of the intentions of the Project URBE housing component was to facilitate growth of local business activities relating to housing. By shifting from home construction to the HIL program, MIVI has cut out support for local contractors. By establishing its own building materials supply operation, it deprives this private sector area as well.

Provision of cash loans would reverse this pattern. In addition to the sales of materials themselves, local transport could be utilized to deliver purchases to home sites. Conversion to cash loans would infuse local construction firms with huge volumes of sales over the next decade. It seems certain that a proportion of the loan recipients would also pay for services of local contractors if they were able to do so. Employment generated through this device would be substantial and significant.

If there is pervasive apprehension concerning the possibility that recipients will misuse cash grants, a simple solution is at hand. MIVI could issue vouchers for materials redeemable with local suppliers or transport operators. Vouchers could be exchanged for cash on a monthly basis at regional offices.

Government officials who voice some anxiety about the escalating cost of building materials in the hands of private suppliers can also be persuaded by available options. In many developing countries, governments maintain supplies of commodities in regional warehouses as a price control measure. For example, the existing deposit could be stocked with building materials priced 5-10% above the local commercial market. This "buffer stock" would not be purchased unless local suppliers raised their prices above the ceiling fixed by the deposito. Should they do so, purchase of materials would flow to the MIVI deposito and a price reduction would be enforced on the local suppliers by the market mechanism.

3. The move toward greater flexibility

In addition to the substantial savings in costs incurred by MIVI, and the stimulation of the local building supply and construction markets, there is a final advantage worth considering. The HIL program has built-in rigidities which result from its adherence to a building materials policy.

The plight of the fully employed household head was touched upon in the preceding section. He may have income sufficient to finance a core house ($1,500) and also to purchase the additional labor ($350-450) if payments can be extended over five to ten years. What he may not have is time to build it himself.