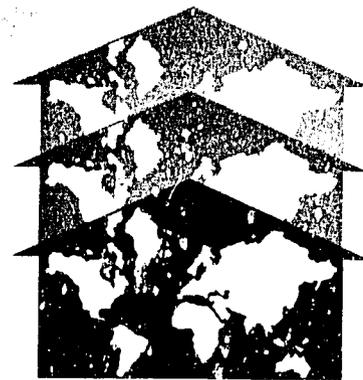


DRAFT

THE STATE OF URBAN PLANNING
IN PANAMA: INVESTIGATIONS
TOWARD THE DEVELOPMENT
OF PROJECT PAPER HG-012

May 1983



OFFICE OF HOUSING
AND URBAN PROGRAMS
AGENCY FOR
INTERNATIONAL DEVELOPMENT

Prepared by

PADCO

PLANNING AND DEVELOPMENT
COLLABORATIVE INTERNATIONAL

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(DRAFT)**

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COLLABORATIVE INTERNATIONAL**

April 1983

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α

INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

In response to a request from AID's Regional Housing and Urban Development Office for Latin America, PADCO has prepared this report on The State of Urban Planning in Panama: Investigations Towards the Development of Project Paper HG-012. This report includes an examination of Panama's institutional base for planning, an analysis of the state of the art of planning in general and specific plans for the urban renewal areas of Panama City, Panama City in general, and the Metropolitan Area, including Colon. In addition PADCO has analyzed Panama's process for planning in the reverting areas of the Canal Zone and made recommendations for changes in the institutions and planning process. To supplement this work, this study also presents an analysis of needs, affordability and production of housing in the country and examines the current state of housing policies and plans. While in Panama, the RHUDO asked the consultant to appraise the idea of "reception areas" for incoming migrants to the Panama City area, and thus a section on this concept is found in the report.

The report is organized in the following manner:

- Part I. Need, Capacity to Pay and Production of Housing
- Part II. MIVI Institutional Analysis, including a look at the State of the Art of Planning and Housing Policy and Plans
- Part III. MIPPE Institutional Analysis, including an analysis of the State of the Art of Planning within that institution

Part IV. Planning for the Reverting Areas of the Panama Canal Zone

Part V. Analysis of the Reception Area Concept

Major finding and recommendations may be summarized as follows:

Part I. Need, Capacity to Pay and Production of Housing

- Panama will need in the order of 200,000 new solutions to meet population growth between 1983 and 1990; over half of these will have to be priced at \$80 per month or less to be affordable to the population. The Ministry of Housing's production has been at the rate of less than 5,000 solutions a year. While their units have been affordable to the target group, their cost has only been achieved through significant subsidy of units by discounting land costs and the offering of elaborate financing schemes. Actual cash flow in MIVI appears to have been subsidized by overcharging beneficiaries of sites and services and basic units, and undercharging recipients of completed units and urban renewal units.

Part II. MIVI Institutional Analysis

- Over 70 percent of MIVI's housing production has been in completed units; to achieve greater consonance between the cost of units produced and prices affordable to the target population, MIVI should lower its building standards and shift production from completed units to basic units and sites and services.
- While some phases of planning in the urban renewal areas have been good, costing of units has not been realistic. In addition, the impact of

increased population has overburdened certain portions of the water and sewerage systems. Future programming should include funds for relocating existing small commercial establishments.

- MIVI's recent institutional reorganization has improved communication and coordination within that agency and is a step in the right direction. Continued emphasis should be given to dove-tailing the activities of one section with the others.
- MIVI's land use zoning and building standards appear reasonable and do not inhibit access by the target population to housing.
- MIVI's plans for cities are generally good, although traditional and wholly physically oriented. More attention is needed to place its plans within an economic context.
- There is no current, complete plan for Panama City due to the reversion of land within the Panama Canal Zone, which lands immediately abut Panama City. Now is the time to produce a concept plan for Panama City and environs. This should be done under the auspices of The Committee for the Reverting Areas.
- Prior to the preparation of a concept plan, MIVI and MIPPE should jointly prepare a nation-wide Urban Development Assessment. This UDA can and should be produced with technical assistance to the Committee for the Reverting Areas.
- MIVI does not have an integrated housing policy or yearly production plan and the lack of such plans clearly hamper its effectiveness. MIVI should produce such plans with technical assistance if needed.

- Work should continue on the definition of housing demand with computerization of applications for MIVI housing. Technical assistance to set up the data base and get the computer functioning is mandated.

Part III. MIPPE Institutional Analysis

- MIPPE has responsibility for preparing national growth plans within an economic context, but has failed to do so. The lack of such plans to guide growth and development and coordinate public investments has proved to be a hinderance. Technical assistance should be made available to MIPPE's Bureau of Economic and Social Planning to formulate such a general economic plan and program.
- Technical assistance should be given to MIPPE and MIVI, as mentioned previously, to prepare an urban development assessment.
- Reorganization of the Bureau for the National Budget is needed to allow it to produce timely annual budgets.
- A regional economist should be added to the staff of the Bureau for Regional Planning and Coordination.

Part IV. Planning for the Reverting Areas of the Canal Zone

- The reverting lands in the Canal Zone represent a unique and valuable resource to Panama, both in terms of potential cash flow to the national treasury through judicious sale of the land and in terms of urban development because of the siting of the lands.

- Land in the reverting areas should not continue to be given away. A land pricing policy and determination of the rate and timing of land sales should be established within the Committee with the help of a full-time land economist.
- Physical standards to be used in the development of the reverting lands should be carefully scaled to ultimate population densities so as to not waste money in overbuilding infrastructure.
- Special attention will have to be given to the potential problem of squatters in the Reverting Areas, places carefully chosen for low-income housing and solutions, and possibly money set aside to subsidize low-income households on a short-term basis during the target group's settling-in period. Such funds might be provided through judicious sale of lands in the Zone.

Part V. The Reception Area Program

- Before the reception area program is initiated, several factors must be considered including geographic location and suitability of sites, affordability, employment, scale, and demand.

I. THE NEED, CAPACITY TO PAY, AND PRODUCTION OF HOUSING

A. The Need for New Housing and Accompanying Services

According to the preliminary results from the 1980 Census, Panama had a population of 1.83 million people in 1980 housed in 383,000 units. In the decade from 1970-1980, the population increased at an average 2.5 percent annual rate. Housing units during the same decade increased 2.89 percent per annum. The decade from 1980 to 1990 is expected to see a slight decline in the trends. Calculations are based on the assumption that the country growth rate will slow to 2.4 percent from 2.5 percent. Further it is estimated that while the urban areas will continue to be the recipient of the greatest growth, the rate of that growth in Panama City (PC) will decline from the 3.7 percent recorded in 1970-1980 to 3.3 percent from 1980-1990 because of deliberate government policy to divert population to medium-sized secondary cities through increased infrastructure investment.

As can be seen in Table 1, of a total need for 515,000 units in 1990, 383,000 units were already part of the housing stock in 1980. Between 1980 and 1983 it has been calculated that 14,000 units were built either by the Ministry of Housing or the private sector. Thus the demand for new housing to accommodate population growth will be 118,000 units. (See Table 2). In addition, 33,000 units have been condemned and need to be replaced. Another one to two percent of the stock will fall into total disrepair annually and also need to be replaced (representing

TABLE 1
POPULATION, PERSONS PER HOUSE, NUMBER OF HOUSING UNITS AND GROWTH RATES, 1980 TO 1990

	1980 ^a			Growth ^b Rate	1990		
	Population (in millions)	Persons Per House	Housing Units (in millions)		Population (in millions)	Persons Per House ^d	Housing Units (in millions)
Urban	.90	4.50	.200	2.7	1.175	4.3	.277
Panama Metro ^c	.76	4.63	.165	3.3	1.054	4.4	.236
Rural	.93	5.08	.183	2.1	1.144	4.8	.238
Total	1.83	4.78	.383	2.4	2.32	4.5	.515

^a 1980 figures are from the Census Nacionales de 1980, Octavo Censo de Poblacion. Cuarto Censo de Viviendas 11 de Mayo, 1980, Resultados Avanzados Por/Muestra. Volumen 1: Viviendas y Hogares.

^b Urban, rural and total growth rates quoted from World Bank "Staff Appraisal Report. Panama, Second Water Supply and Sewerage Project." November 12, 1982.

^c Panama metro area growth rate based on PADCO estimates.

The Panama Metropolitan area is defined for the purposes of this study as being made up of the following districts: Arraijan, Balboa, Chorrera, Panama City and San Miguelito.

^d PADCO assumes an ever-decreasing household size, down .26 persons per household over the 1980-1990 decade, as was found in the 1970-1980 decade.

TABLE 2

3

1983 - 1990 NEED FOR NEW HOUSING AND SERVICES

Category	Total	Urban	Rural	Panama City Metropolitan Area
New Housing to Meet Population Growth	118,000 ^a	63,000	55,000	61,000
New Housing to Replace Condemned Units	33,000	18,000	15,000	11,000
New Housing to Replace Units Which will Fall Into Disrepair 1983-1990	38,000 - 76,000	20,000 - 40,000	18,000 - 36,000	16,500 - 33,000
Total New Production Needed 1983-1990	189,000 - 227,000	101,000 121,000	88,000 - 106,000	88,500 - 105,000
Needed Annual Production 1983-1990	24,000 - 28,000	13,000 - 19,000	11,000 - 19,000	11,000 - 13,000
Overcrowded Units ^b	128,000	57,000	71,000	43,000
Units With Structural Defects	95,000	15,000	80,000	10,000
Services:				
Lacking Potable Water	70,000	3,500	66,500	2,700
Lacking Sanitary Facilities	43,500	3,500	40,000	3,000
Lacking Baths	120,000	15,000	105,000	13,000
Lacking Electricity	125,000	15,000	110,000	13,000

^a Estimated to be 132,000, but between 1980 and 1990 14,000 units were built by MIVI and the private sector.

^b Overcrowded units are defined as those having 2.01 persons and more per room.

Source: "Censos Nacionales de 1980 - Octavo Censo de Poblacion, Cuarto Censo de Vivienda, 11 de Mayo de 1980. Resultados Avanzados por Muestra, Vol. I, Vivienda y Hogares."

38,000 to 76,000 units per annum). The need for new housing between 1983 and 1990 therefore will be 189,000 to 227,000 units. This figure represents a 50 to 60 percent increase in the current housing stock.

Even were no population increases recorded during the decade, the demand for new housing would still exist due to a pattern of decreasing household size (from 4.78 persons per household to 4.5 persons per household.) This accounts for 24,000 units of the total.

More than half of the need for new housing, 53 percent, is in the urban areas, and 88 percent of all urban housing need will be in the Panama City Metropolitan area. There is an obvious need to continue an aggressive housing-shelter program in the Panama City area.

While the need for new housing is high, the need for building loans is even higher -- for adding on rooms to already-built units to relieve overcrowding, and for loans to repair serious structural defects in the present housing stock. Using a standard of more than two persons per room as an indication of overcrowding, 128,000 homes, 33 percent of the stock, were deficient. This tendency is more evident in rural than urban areas.

The actual number of buildings constructed of temporary materials is hard to estimate since the census gives no indication as to whether these defects occur independently or simultaneously, i.e., floor of

earth, walls of straw, or a roof of scrap. We have taken the view that such problems tend to occur simultaneously, e.g., when a floor is of earth, walls are often made of cane, roofs made of temporary building materials, and so, the statistics quoted above may underestimate the problems. Of the 95,000 units that are in partial repair or totally improvised, 80,000 or 84 percent, are located in rural areas. Loans for building materials in rural areas would seem to be a high priority.

The number of units lacking basic services has dramatically decreased over the last twenty years, although substantial numbers of units, especially in rural areas, remain without essentials. For example, in 1960 43.7 percent of the housing stock was without access to potable water. In 1970 this declined to 35.7 percent, and in 1980 to 19.2 percent. Of the approximately 70,000 units without potable water, 66,000 are in rural areas. Similar improvements can be seen in the provision of sanitary services: 11.9 percent of units lacked such service in 1980, compared to 28.3 percent in 1970 and 38.4 percent in 1960.

High deficiencies are still found, however, in electrical services. More than one-third of the country's dwelling units must use gas, kerosene or candles to light their homes. Again, there is an especially acute need for provision of such service in rural areas.

B. The Capacity to Pay for Housing

The capacity to pay for housing varies greatly and is related to family income. The higher the income, the more able a family is to spend a greater proportion of their income on housing. At the lower deciles, the theoretical rule of thumb of 25 percent of family income for housing is far too high, as it would literally force such a low income family to forego other basic necessities such as food and clothing.

The scale below (Table 3) is one used by Asuntos Sociales in the Department of Planning at the Ministerio de Vivienda (Ministry of Housing) (MIVI) in their housing program for squatters in San Joaquin, Pedregal. (MIVI also uses a more complicated set of scales, with slightly higher percentage rates for Panama City and Colon, other urban centers and rural areas. For this set of scales see Annex i, attached). This scale was chosen because it is used in most of MIVI's programs.

TABLE 3

AFFORDABLE PAYMENTS FOR HOUSING BASED ON MONTHLY INCOME

<u>Monthly Income</u>	<u>Percent Allotted to Housing Expenditures</u>	<u>Affordable Monthly Payments</u>
Under B/.100	10%	less than \$10
100-149	10%	10-15
150-199	15%	16-30
200-399	20%	31-80
400-499	25%	81-125
500 and up	30%	125+

The most recently published household income data comes from the 1980 Census volume on Viviendas and Hogares, wherein tabulations were based on a 20 percent sample of the available data base. Tables V-10 and V-37 in the Census give data on occupied housing by number of units and family monthly income. Median income for the country is calculated at \$240 a month. City incomes are dramatically higher than in rural areas, viz median for all urban areas is \$355; in Panama City it is \$399; in San Miguelito, a lower income enclave northeast of Panama City, it is \$325; rural median is half of country median and one-third Panama City income at \$129. For more detailed information on income by decile, see Tables 4 and 5 and graphs 1-5 on the next pages.

If we assume that the profiles of income distribution will not change drastically in the next decade, the implications for housing programs are clear: half of the needed new housing starts, approximately 95,000 to 110,000 units, should be built to rent or sell to families making \$399 per month or less, at a cost they can afford, i.e., \$80 a month or less.

The validity of the 1980 income data is confirmed in an "Analysis of the Socio-Economic Characteristics of Resident Families in the Urban Renewal Areas of the City of Panama,"¹ issued by the Direccion de Asuntos

¹"Analysis de Las Caracteristicas Socioeconomicas de Las Familias Residentes de las Areas de Renovacion Urbana de la Ciudad de Panama (1982-1983-1984)," Febrero de 1983, Direccion de Asuntos Sociales, Departamento de Estudios Sociales de Proyectos.

TABLE 4
1980 MONTHLY FAMILY INCOME - IN BALBOAS - EXCLUDING INDIGENOUS AREAS
TOTAL COUNTRY, URBAN AND RURAL AREAS

	TOTAL COUNTRY HOUSEHOLDS	PERCENT		URBAN HOUSEHOLDS	PERCENT		RURAL HOUSEHOLDS	PERCENT	
		IN COL.	CUM.		IN COL.	CUM.		IN COL.	CUM.
Balboas Per Month Total	304,323			199,750			164,573		
Less than 75	51,815	16.5	16.5	11,890	6.5	6.5	39,925	30.7	30.7
75-99	14,625	4.7	21.2	4,215	2.3	8.8	10,410	8.0	38.7
100-124	19,785	6.5	27.5	8,340	4.5	13.3	11,445	8.8	47.5
125-174	30,385	9.7	37.2	15,250	8.3	21.6	15,135	11.6	59.1
175-249	42,660	13.5	50.7	24,970	13.6	35.2	17,690	13.6	72.7
250-399	53,920	17.1	67.8	35,980	19.5	54.7	17,940	13.6	86.5
400-599	41,260	15.1	80.9	31,950	17.5	72.0	9,330	7.1	93.6
600-799	21,300	6.8	87.7	17,445	9.5	81.5	3,855	3.0	96.6
800-999	12,755	4.1	91.8	10,940	5.9	87.4	1,815	1.4	98.0
1000 and more	25,795	8.2	100.0	23,245	12.6	100.0	2,550	2.0	100.0
Unknown	50,025			15,565			34,460		

Source: Censos Nacionales de 1980 - Octavo Censo de Poblacion, Cuarto Censo de Vivienda, 11 de mayo de 1980. Resultados Avanzados por Muestra, Vol. I. Vivienda y Hogares, Cuadro V-10.

HOUSEHOLD INCOME DISTRIBUTION BY DECILE

DECILE	TOTAL COUNTRY HOUSEHOLDS	URBAN HOUSEHOLDS	RURAL HOUSEHOLDS
10 th	B/. 45	B/. 105	B/. 24
20 th	94	170	49
30 th	140	214	73
40 th	197	285	104
50 th	240	356	129
60 th	330	456	176
70 th	428	562	225
80 th	590	770	330
90 th	875	1,000+	500
100 th	1,000+	1,000+	*1,000+

SOURCE: PACCO elaboration of 1980 Census Data.

Note: The Panamanian Balboa (B/.) is equivalent to the U.S. dollar.

TABLE 5

1980 MONTHLY FAMILY INCOME IN BALBOAS - PANAMA CITY AND SAN MIGUELITO

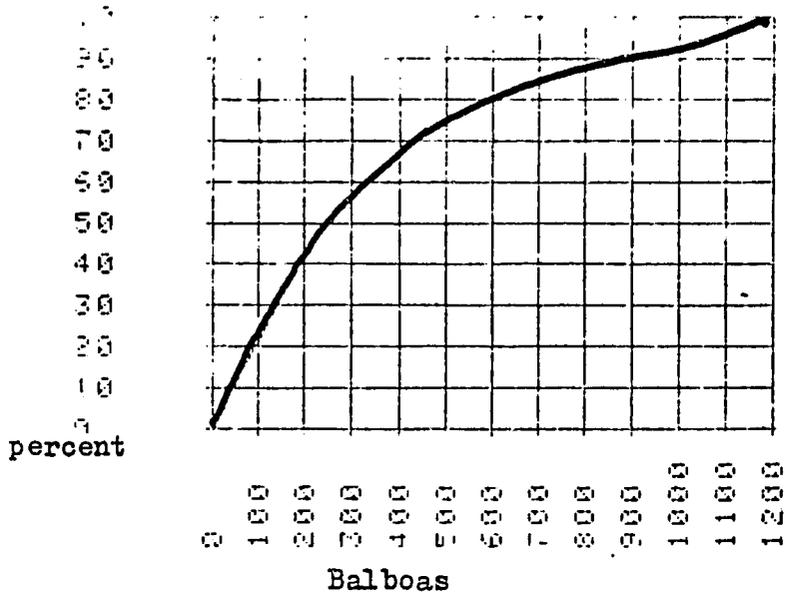
	<u>PANAMA CITY</u>	<u>PERCENT</u>		<u>SAN MIGUELITO</u>	<u>PERCENT</u>	
		<u>IN COLUMN</u>	<u>CUMULATIVE</u>		<u>IN COLUMN</u>	<u>CUMULATIVE</u>
Balboas Per Month Total	109,300			30,315		
Less than 75	5,700	5.6	5.6	1,330	4.7	4.7
76-99	1,945	1.9	7.5	380	1.4	6.1
100-124	3,975	3.9	11.4	1,165	4.2	10.3
125-174	7,735	7.7	19.1	2,690	9.6	19.9
175-249	12,660	12.6	31.7	4,945	17.7	37.6
250-399	18,490	18.3	50.0	6,640	23.7	61.3
400-599	16,900	16.8	66.8	5,265	18.8	80.1
600-799	10,090	10.0	76.8	2,335	8.3	88.4
800-999	6,675	6.6	83.4	1,445	5.2	93.6
1000 and more	16,700	16.6	100.0	1,795	6.4	100.0
Unknown	8,430			2,325		

Source: Censos Nacionales de 1980 - Octavo Censo de Poblacion, Cuarto Censo de Vivienda, 11 de mayo de 1980.
Resultados Avanzados por Muestra, Vol. I. Vivienda y Hogares.

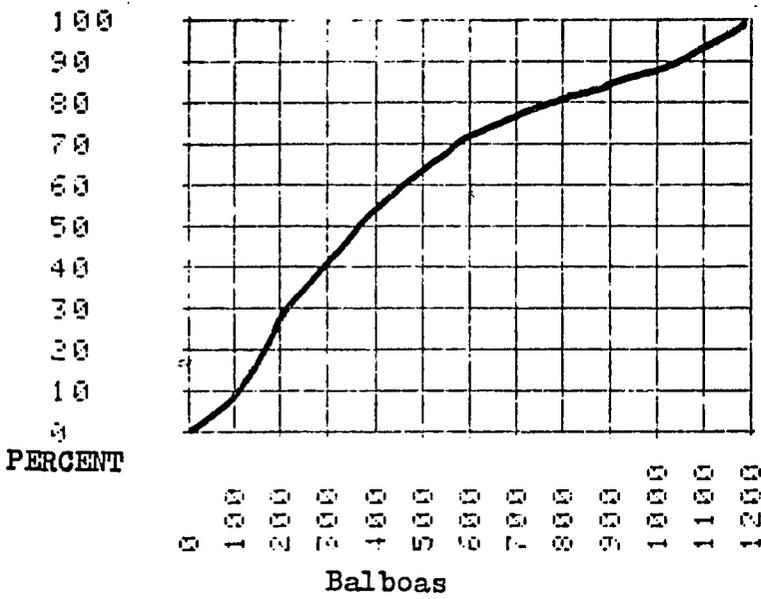
HOUSEHOLD INCOME DISTRIBUTION BY DECILE

<u>DECILE</u>	<u>PANAMA CITY</u> <u>HOUSEHOLDS</u>	<u>SAN MIGUELITO</u> <u>HOUSEHOLDS</u>
10 th	B/. 112	B/. 118
20 th	175	175
30 th	235	212
40 th	319	260
50 th	399	325
60 th	506	388
70 th	636	480
80 th	875	598
90 th	1,000+	850
100 th	1,000+	1,000+

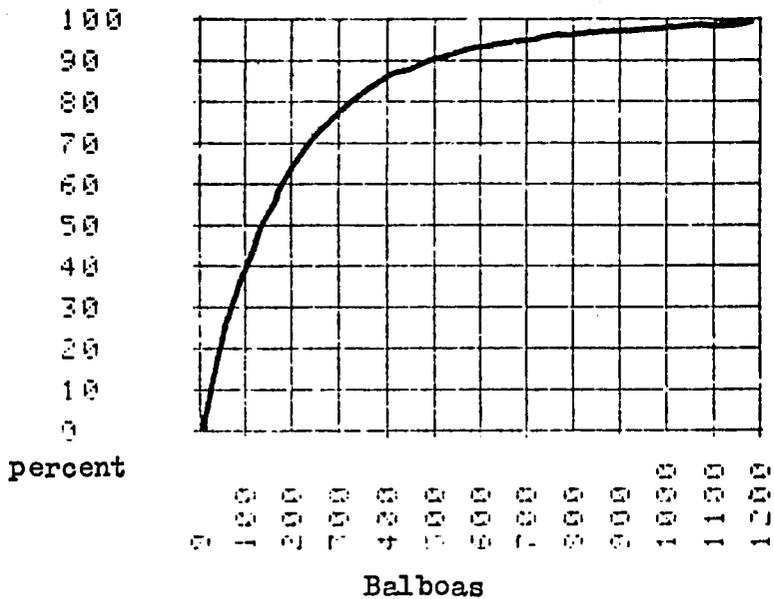
SOURCE: PADCO elaboration of 1980 Census Data.



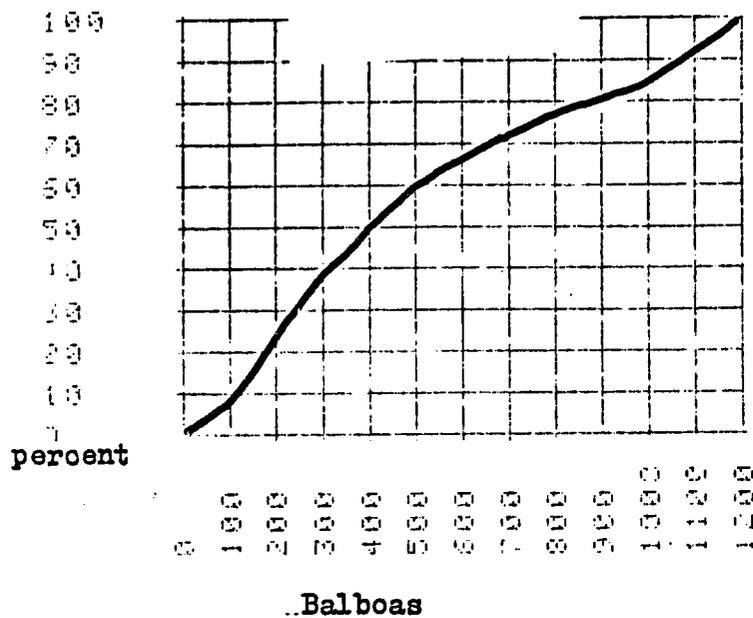
Graph 1
1980 Monthly Family Income in B/.
Total Country Households



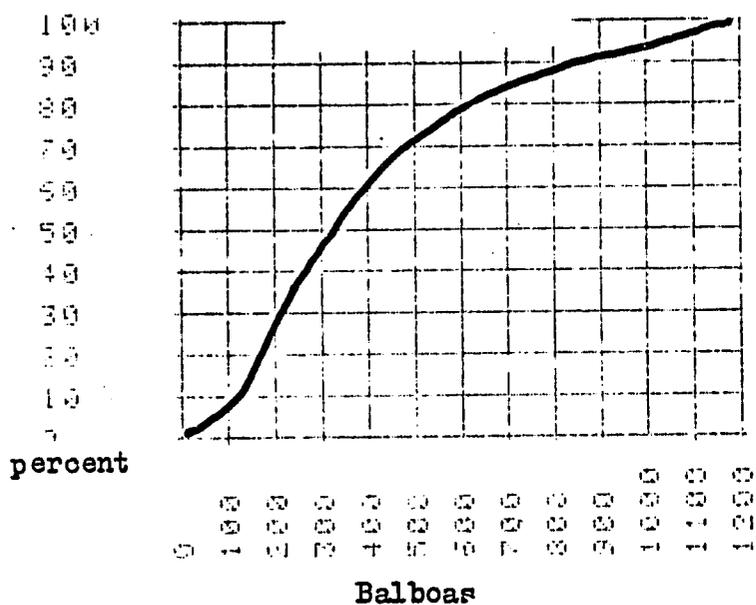
Graph 2
1980 Monthly Family Income in B/.
Urban Households



Graph 3
1980 Monthly Family Income in B/.
Rural Households



Graph 4
1980 Monthly Family Income in B/.
Panama City Households



Graph 5
1980 Monthly Family Income in B/.
San Miguelito Households

Sociales, the Social Affairs Office of the Ministry of Housing. In this survey of the neighborhoods of Chorrillo, Santa Ana, San Miguel and Curundu, median family income was \$270 a month. Only 12 percent of the population within these inner city neighborhoods made more than \$500 a month.

Recent urban squatters to the city make even less income. In a report issued by Asuntos Sociales entitled "Report on Family Income on the 127 Families Who Invaded Lands on the Ministry of Housing in San Joaquin, Pedregal,"² median family income was found to be slightly less than \$200 a month.

Due to differences in median incomes in urban and rural areas, the demand for new housing can be more carefully scaled to income and affordability by geographic area. Thus in Panama City, as a whole, where median family income is \$399, and where 88,500-105,000 new units will be needed to house new population between 1983 and 1990, the majority of solutions should be priced between \$25 and \$80 per month. In rural areas, where incomes are much lower, solutions should be priced to rent or sell for no more than \$20 a month.

What this leads to is a need to continue with pared-down urban renewal units; to emphasize sites and services, piso-techo and core units in

²"Informe Sobre Ingresos Familiares de 127 Familias Que Invadieron Los Terrenos del Ministerio de Vivienda En San Joaquin, Pedregal," Mar. 30, 1983, Direccion de Asuntos Sociales, MIVI.

urban areas; and to focus attention on home improvement loans and sites and services in rural areas.

C. MIVI Housing Production and Investment

Housing production by MIVI, the sole builder of low income solutions, can be seen in Table 6. From January 1980 through the end of January 1983, MIVI constructed 7,627 solutions. 1,866 units were built in the urban renewal areas; 1,334 in Panama City, 535 in Colon. Another 1,638 families have been helped in squatter areas through legalization of lots and building materials loans. The peripheral areas of Panama have received a great deal of attention, in the Torrijos-Carter and Robert Duron projects. In all, 2,405 solutions have been built there. For a more complete breakdown of all MIVI projects by geographic area and year, see Table 7.

D. The Cost of Solutions Produced by MIVI

MIVI has cost data on a little less than half of its units. Of the 10,102 solutions for which this data is available, (see Table 8 below), 80 percent fall into a price range (\$80/month and less) which is affordable to a family making median income and less in Panama City. 30 percent of the reported units rent for \$50 a month or below, to meet the needs of people whose income matches the country-wide median. The extreme poverty of rural households makes all but home improvements, and

TABLE 6
HOUSING PRODUCTION AND INVESTMENT
MINISTRY OF HOUSING 1973-1982

YEAR	TOTAL SOLUTIONS	NUMBER OF SOLUTIONS		INVESTMENT ('000 BALBOAS)
		URBAN	RURAL	
1973	206	206	-	1,477.2
1974	979	952	27	5,004.0
1975	1,119	1,040	79	9,804.3
1976	4,330	4,210	120	36,175.6
1977	5,894	5,614	280	37,851.4
1978	3,530	3,063	467	25,842.8
1979	1,858	1,781	77	10,103.3
1980	1,206	1,150	56	3,171.8
1981	1,301	1,240	61	5,128.6
1982*	5,374	5,237	137	25,929.2**
TOTAL	25,797	24,493	1,304	160,488.2

* Includes housing through January 1983.

** Estimated investment.

Source: Direccion de Programacion y Presupuesto, Ministerio de Vivienda.

TABLE 7
DISTRIBUTION OF NUMBER OF SOLUTIONS CONSTRUCTED BY THE MINISTRY OF HOUSING ACCORDING TO PROGRAM AND PLACE, 1973-1982

PERIOD	P R O G R A M							RURAL HOUSING	TYPE OF SOLUTION		# OF SOLUTIONS
	URBAN RENOVATION PANAMA	COLON	PERIPHERAL AREAS PANAMA	COLON	SQUATTER SETTLEMENTS	HOME IMPROVEMENT LOANS	URBAN CENTERS AND SECONDARY CITIES		MULTI. FAMILY	SINGLE FAMILY	
TOTAL	<u>4,717</u>	<u>480</u>	<u>15,402</u>	<u>1,439</u>	<u>1,400</u>	<u>1,337</u>	<u>965</u>	<u>1,183</u>	<u>9,012</u>	<u>13,624</u>	<u>25,373</u>
1973			206						180	26	206
1974	952							27	952	27	979
1975	88		932					79	790	329	1,119
1976	946	150	3,310	228			120	100	3,956	898	4,854
1977			4,111	875		170	437	301	688	5,056	5,894
1978			2,850	75		125	78	416	680	2,739	3,544
1979	70		1,568	66		33	25	126	230	1,625	1,888
1980	316	96	476			111	50	56	412	582	1,105
1981	126	42	588	100	641	136	187	36	168	911	1,856
1982	764	192	1,341		759	762	68	42	956	1,451	3,928

Includes lots with water.

Source: From 1983 MIVI Report entitled "El MIVI en la Problemática Habitacional de Panamá."

TABLE 8
MIVI PRODUCTION OF UNITS BY YEAR OF CONSTRUCTION AND
AMOUNT OF MONTHLY PAYMENT, 1978 TO 1982

Monthly Payment in Balboas

Year	less than 15	16-30	31-80	81-125	126+	Total
1978	60	312	1,202	1,765	0	3,339
1979	0	171	1,367	160	17	1,715
1980	0	251	572	0	0	823
1981	0	255	707	0	24	986
1982	0	623	2,500	116	0	3,239
TOTAL	60	1,612	6,345	2,041	41	10,102

sites and services unaffordable to this group, and in fact nothing except home improvement loans has been offered by MIVI in the less than \$15 category.

E. Affordability of New Housing

A comparison of what households can afford to pay for housing with the need for new housing, and the price of MIVI housing in 1983 is illuminating (see Table 9). If MIVI continues to produce the bulk of its solutions in the Panama City area for an average cost of \$9,500 per unit, a total capital subsidy of almost \$202 million will be needed to support new housing starts through 1990. If, however, they choose to either lower standards of their urban renewal units to bring costs into line with the urban household's capacity to pay for housing, no subsidy will be needed. Also, if MIVI chooses to concentrate on offering basic units and sites and services in Panama City, again no subsidy will be needed.

TABLE 9
COMPARISON OF TOTAL HOUSEHOLD AFFORDABILITY FOR NEEDED
NEW HOUSING, 1983 to 1990, WITH CURRENT MIVI
PROJECT COSTS

AREA	1980 MEDIAN HOUSEHOLD INCOME (\$)	PERCENTAGE AFFORDABLE FOR HOUSING: MAXIMUM MONTHLY PAYMENT	PRICE OF A HOUSE CAN BE AFFORDED ^a	NEEDED SOLUTIONS 1983-1990 ^b	TOTAL CAPITAL AFFORDABLE ^c (IN MILLIONS)	AVERAGE COST OF CURRENT SOLUTIONS ^d	COST OF NEEDED HOUSING 1983-1990 AT 1983 PRICES ^e (IN MILLIONS)	TOTAL CAPITAL SUBSIDY NEEDED 1983-1990 USING CURRENT COSTS ^f (STANDARDS)
Panama City	\$399	20%; \$79.80	\$7,577	88,500 - 105,000	\$670.6 - \$795.6	Completed Units: \$7,000 - \$9,500	\$619.5 - \$997.5	0 - \$201.9
						Basic Units: \$5,500 - \$6,000	\$557.6 - \$630	0
						Sites and Services: \$1,900	\$68.2 - \$199.5	0
Other Urban	\$356	20%; \$71.20	\$6,760	12,500 - 16,000	\$84.5 - \$108.2	Completed Units: \$3,000 - \$7,000	\$37.5 - \$112	0 - \$3.8
						Sites and Services: \$1,500	\$18.8 - \$24	0
All Rural	\$129	10%; \$12.90	\$1,225	88,000 - 106,000	\$107.8 - \$129.9	Completed Units: \$3,000 - \$7,000	\$264 - \$742	\$156.2 - \$613.1
						Sites and Services: \$1,500	\$132 - \$159	\$24.2 - \$29.1
TOTAL	\$240	20%; \$48	\$4,272	189,000 - 227,000	\$862.9 - \$1,033.7			\$24.2 - \$846.9

^a Based on current standards 1.0%, 12 % interest for 25 year term.

^b Needed solutions is defined as including new housing to meet population growth; new housing to replace already condemned housing; new housing to replace that which will fall into disrepair during the years 1983-1990 - assures 1% to 2% replacement need. This figure does not include production to alleviate overcrowding or production to fix up homes that are partially built.

^c Total capital affordable is derived from multiplying present affordable housing by number of needed solutions.

^d The average cost of current MIVI solutions varies widely as can be seen in the table on MIVI Housing Production 1978-1982. This table, therefore, uses a range to represent costs.

^e The cost of needed housing is derived from multiplying the number of needed solutions by current cost of solutions.

^f Total capital subsidy is derived by subtracting total capital affordable from cost of needed housing at 1983 prices.

In urban areas outside of Panama City, the most affordable solutions are sites and services and basic core units. Completed solutions costing over \$6,760 to construct will put MIVI into the red.

The greatest problem occurs in the rural areas because of lack of disposable income. Completed units are clearly out of line with what is affordable. If MIVI were to concentrate on providing standard one and two bedroom units, meeting the demand for new housing would cost them slightly over \$612 million in the period from 1983-1990 alone. Even sites and services are unaffordable to rural households at the cost currently being offered by MIVI. Clearly, a scaled down version of a site with services, perhaps eliminating excessive preliminary grading, and home improvement loans are the only affordable solutions in rural areas.

II. THE MINISTRY OF HOUSING (MIVI)

A. Inception and Purposes

The Ministry of Housing (Ministerio de Vivienda, MIVI) was established in January 1973 by Law No. 9. The law endowed MIVI with a wide range of powers in three broad areas:

1. Preparation of housing policy and the execution of public housing programs oriented towards lower-income groups with limited or no access to private commercial markets. In conjunction with these powers MIVI was endowed with the power to regulate rents, approve housing investments, promote private investment in the housing market through taxation if necessary and recommend purchase of lands for housing;
2. Preparation of urban development policy, determining and directing such a policy including the coordination of public investments to support plans and policies; and to undertake by themselves or with private entities the elimination, reconstruction or rehabilitation of certain urban areas;
3. The preparation and implementation of regulations such as zoning, subdivision regulations, building regulations, official city maps, urbanizations in general.

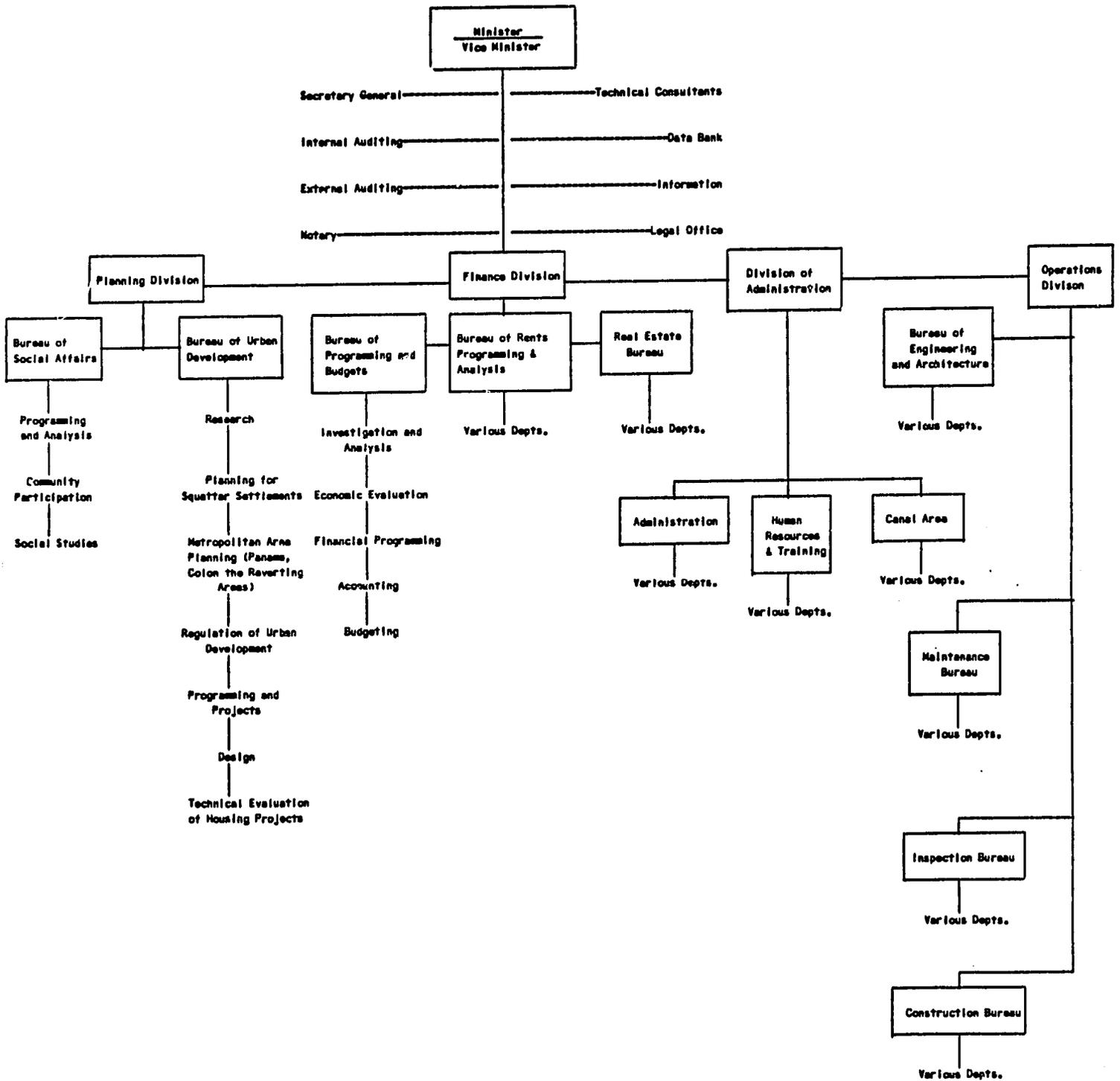
While both urban development and housing planning are centralized in Panama City, MIVI has agencies in Colon, David, Chiriqui, Herrera, Cocle, Santiago and Bocas del Toro. These "agencias" help to administer the rent control laws, arrange for leasing or sale of their housing units, do social investigation, offer legal help, and advise on code matters. In the smaller towns, coordination with MIVI officials is handled by the local Municipal Engineer's office which is in charge of issuing construction permits, and building inspections. MIVI's large professional and technical staff, numbering 1,500-2,000 employed³ coupled with its large scope of work, makes it theoretically possible to coordinate urban planning and housing both regionally and sectorially in an effective manner on the local level.

B. Organization and Staffing

In an effort to increase effective intra-departmental communication, MIVI reorganized its staff in 1982 (see organization chart, Table 10). Bureaus (Direcciones) whose work is interrelated now have been grouped into a single division. Weekly staff meetings are held by division heads. Almost daily meetings are held between bureau chiefs. Principal divisions are: The Minister and Vice-Minister; the Planning Division; the Finance Division; the Administrative Division and the Operations Division.

³MIVI was asked to supply the number of its employees by division, but was unable to do so during the course of the study.

TABLE 10
 MINISTRY OF HOUSING (MHI) - ORGANIZATIONAL CHART (Simplified)



1. The Office of the Minister and Vice-Minister in addition to the usual secretarial and auditing functions has a new department of Technical Assistance, which contracts experienced personnel on a one-year basis. A centralized data bank has just been established to regularize the record information from all the bureaus. The system has not yet begun to operate, and is a high priority candidate for technical assistance. A Special Notary's Office has also been put into effect to register deeds for beneficiaries of MIVI housing.
2. The Planning Division now combines two formerly separate bureaus; Social Affairs (Asuntos Sociales) and Urban Development (Desarrollo Urbano).

Asuntos Sociales is divided into three departments:

- a. The Department of Programming and Analysis is responsible for the processing of applications for public housing, and for relocation of families in urban renewal areas who will not be moving into the proposed project. Interested applicants are investigated fully both on paper as in respect to their financial statements, family composition, and ability to pay for housing and through home visits to verify the family's current living condition. Asuntos Sociales estimates that they receive between 6,000 and 8,000 applications for public

housing per year. Computerization of this department's records would prove invaluable to future MIVI programming of number, types and cost of solutions.

- b. The Department of Community Participation (Departamento de Desarrollo y Organizacion Comunitaria) works as promoters of MIVI projects, and as a combination neighborhood planner and social worker, to help families move into the projects, deliver talks on neighborhood organization and health care. Personnel help to organize community groups within the housing projects to carry out local public works and other special neighborhood projects. In addition, MIVI staff from this Division, act as the liaison between MIVI and other governmental agencies to receive complaints, coordinate programming, and as general ombudsmen.

- c. The Department of Social Studies (Estudios Sociales) is responsible for preparing an analysis of the demand for MIVI housing based on the applications received by their department. A monthly record of applications by type is being kept for the first time, and the unit plans to do a national study from information collected from all projects in the country. As of now, studies have been done in Chorrillo, Santa Ana, Calidonia, Curundu and Colon.

In the past, Asuntos Sociales had charge of receiving applications and gathering information about prospective client's income, but little say in the actual selection of beneficiaries or in design of solutions to meet their needs. Now the Direccion de Asuntos Sociales meets with the Direccion de Bienes Racies (Real Estate) to select the beneficiaries directly. Guidelines have been established for selection of beneficiaries. These are: (1) level of income; (2) date application was submitted; (3) social criteria - does the family live in condemned structure, one that is dangerous to health, live in overcrowded conditions, i.e., 3 or 4 families living in a space for one; (4) do they live in a house that is going to be condemned or a casa transitoria; and (5) was the family sent by the Minister or Vice-Minister. The reason for stating the last condition so boldly is simple, it cuts down on possible graft within the agency. This study was unable to gather data on the relative weighting of each of the criteria used for selecting beneficiaries.

The director of Asuntos Sociales has stated that the relationship between Asuntos Sociales and Desarrollo Urbano has improved significantly since the reorganization. The Urban Development Bureau has increasingly taken social data into account in terms of design standards, and as a result, have lowered the standards of their Phase II units in the urban renewal area to reach lower-income

groups, satisfying a previously unmet demand for cheaper units. As a result, Phase II units will be simpler in terms of size of the unit, and will lack extras offered such as elaborate exterior painting. Discussion is increasingly focused on the need to further lower the cost of the solutions, by building more basic units, stressing rehabilitation of existing units rather than building anew if costs justify the approach, and relying on self-help. More work needs to be done in this field, although the trend within MIVI is encouraging.

The Director of Asuntos Sociales would like to initiate a new section of evaluation, to do follow-up studies in completed projects in both Panama City and the interior.

The other major division of the planning section is the Urban Development Bureau which has 61 staff for its seven departments. It is this Bureau which is in charge of preparing urban plans; setting standards for buildings, zoning, street widths, development of a housing policy and programs, and review of subdivision plans and the like to see if they conform to code. With the reorganization of MIVI in 1982, Desarrollo Urbano gained control for the first time of formulation and programming of projects. A new Design Department within the Bureau will do technical evaluations of building designs and more in-depth urban analysis to ensure that low-income client group needs are being better met and

that urban design projects fall into a reasonably ordered pattern. Detail on the products produced by this bureau, and an evaluation of their effectiveness can be found in Section C below, Current Programs.

3. The Finance Division's Bureau of Programming and Budget is in charge of assuring that programs are executed in a timely manner, in seeing that funds are dispersed as needed, and have the accounting and budgeting functions. One of its most extensive divisions is the Rent Bureau which is in charge of administering the rent control program. Its Bureau of Real Estate is in charge of mortgage and sale of MIVI housing projects.
4. The Administrative Division in addition to taking care of MIVI's internal needs is charged with administering the already existing housing in the Canal Zone Area: its rent, repair and sale.
5. The Operations Division is divided into four sections: Engineering and Architecture do detailed plans for housing based on Urban Development's suggestions; Maintenance takes care of MIVI-owned buildings wherein apartments are rented out in the Metropolitan Area and the country as a whole; the Inspection Division is charged with seeing that site plans conform to the specifications agreed to during the building process; the Construction Bureau's functions, diminishing as MIVI contracts more and more of its work out to

the private sector, is in charge of constructing MIVI units. The Bureau is most active in the interior where trained construction companies are most scarce.

Inter-institutional coordination with the semi-autonomous water and sewerage agency, Instituto de Acueductos y Alcantarillados Nacionales (National Institute for Water and Sewage, IDAAN), and the Instituto de Recursos Hidroelectricos (Institute for Hydraulic and Electric Resources, IRHE), appears to be good. MIVI regularly informs either agency of their plans for development of such services within their projects, and takes direct charge of construction. The lines, once established, are then turned over to IDAAN or IRHE for maintenance.

C. Current Programs

1. Housing

MIVI's housing program includes five main types of solutions: (1) completed single family and apartment units; (2) urban renewal units in Panama City; (3) core units and "piso-techno" (floor-roof) in Panama City and Colon; (4) sites and services and partially urbanized lots in Panama City and the interior and (5) home improvement loans. Production of these units by number and range of costs of solutions is shown as follows in Table 11:

TABLE 11
MIVI Housing Production: 1978-1982

Type of Units	Number Produced	Approximate Unit Cost(s)	Approximate Monthly Payment(s)
1. Completed Solutions			
- in Panama City	5,167	\$3,000-\$10,000	\$25-\$125
- in Colon	273	\$8,000-\$11,000	\$80 and up
- in the Interior	919	\$6,000-\$10,000	\$45-\$80
2. Urban Renewal			
- in Panama City	1,354	\$7,000-\$9,000	\$52-\$75
3. Core Units, Piso-Techno			
- in Panama City	1,675	\$3,000-\$5,000	\$25-\$62
- in Colon	100	\$6,000	NA
4. Sites and Services, Lots			
- in Panama City	260	\$1,900	\$52
- in the Interior	641	\$1,500	NA
5. Loans			
- in Panama City	217	\$400-\$ 1,700	\$27
- in Colon	95	\$1,000	\$16
- in the Interior	115	\$300-\$500	

Source: Ministry of Housing.

Several items are striking about these figures. The first is the predominance of fully completed solutions, over 70 percent of all MIVI housing projects were apartments or single family houses. The cost of these solutions is much higher than partial solutions would be, theoretically putting the bulk of MIVI's solutions out of the reach of half of Panama's households if country-wide income data are used, and out of all households at the 35th percentile and below in Panama City were it not for the subsidy provided by MIVI.

The second telling point is the inconsistency between cost of solution and monthly payment. This becomes evident when the complete list of MIVI projects is examined in full (see Table 12). Working on the assumption that all loans are for 25 years at 12 percent interest, this study calculated the monthly payments theoretically due, and compared this payment to the sum currently being paid by the beneficiary.

TABLE 12
 NIVI HOUSING PRODUCTION: 1978-1982
 BY PROJECT, NUMBER OF UNITS, COST, THEORETICAL MONTHLY PAYMENTS, AND LOSSES OR GAINS

PROVINCE AND PROJECT 1978	SOLUTIONS NO.	TYPE	ESTIMATED INVESTMENT IN THOUSANDS OF BALBOAS	APPROXIMATE COST PER UNIT	APPROXIMATE MONTHLY PAYMENT	MONTHLY PAYMENT CALCULATED AT 12% FOR 25 YEARS	NIVI MONTHLY LOSS OR GAIN (BETWEEN ACTUAL CALCULATED PAYMENT)
<u>PANAMA</u>							
Los Libertadores	240	Apartments	2,551,500	10,631.25	100.00	111	-2,640
Villa Gabriela	320	Apartments	2,891,800	9,036.88	88.00	95	-2,240
San Pedro 3 y 6	120	Apartments	1,138,400	9,486.67	99.00	100	-120
Santa Librada	50	Single Family	370,700	7,414.00	67.00	78	-590
Don Bosco	908	Single Family	11,511,100	12,677.42	115.00	134	-17,252
Cerro Batae 3	228	Single Family	947,100	4,153.95	34.00	44	-2,280
Cerro Batae 4	101	Single Family	419,500	4,153.47	25.00	44	-1,919
San Pedro #2	2	Single Family	20,100	10,050.00	99.00	106	-14
Monteria	175	Single Family	1,363,800	7,793.14	90.00	82	+1,400
Torrijos Carter	376	Single Family	1,753,700	4664.10	51.00	49	+752
Roberto Duran	330	Single Family	896,400	2,716.36	50.00	29	+6,930
Pto. Calmito (I)	35	1-Bedroom Apt.	81,000	2,317.14	20.00	24	-140
Jta. Villa Rosario	28	1-Bedroom Apt.	68,300	2,439.29	24.00	26	-56
CHERO	42	Home Improvement Loan	61,600	1,466.67	39.00	13	+1,008
PACORA	23	Home Improvement Loan	34,700	1,508.70	32.00	16	+368
<u>COLON</u>							
Nuevo Colon (I)	75	Single Family	383,000	5,106.67	50.00	54	-300
<u>VERAGUAS (Asentamientos)</u>							
El Porvenir (I)	41	1-Bedroom Apt.	84,500	2,060.98			
Victoriano Franco	28	1-Bedroom Apt.	75,100	2,682.14			
28 de Noviembre	12	1-Bedroom Apt.	26,100	2,175.00			
Renv. Campesina	20	1-Bedroom Apt.	43,600	2,180.00			
<u>CHIRIQUI</u>							
David II Etapa	60	Home Improvement Loan	61,100	1,018.33	13.00	11	+120
<u>LOS SANTOS</u>							
Sabana Grande	23	1-Bedroom Apt.	46,700	2,030.43	23.00	21	+46
Asentamiento 1° de mayo	10	1-Bedroom Apt.	21,100	2,110.00			
La Providencia	16	1-Bedroom Apt.	35,100	2,193.75			
J. Comunal La Colorada	17	1-Bedroom Apt.	35,400	2,082.35	22.00	22	-0-
<u>BOCAS DEL TORO</u>							
Almirante	17	Single Family	132,600	7,800.00	43.00	82	-663
Bocas del Toro	15	Single Family	103,700	6,913.33	34.00	73	-195
J. C. de Bastimentos	15	1-Bedroom Apt.	149,700	9,980.00	46.00	105	-885
<u>HERRERA</u>							
Union Campesina	29	1-Bedroom Apt.	99,400	2,048.27	-	-	-
Jta. Comunal Pese	35	1-Bedroom Apt.	81,700	2,334.29	27.00	25	+70
El Agallito	21	1-Bedroom Apt.	34,800	1,657.14	19.00	17	+42
Jta. Comunal Parita	25	1-Bedroom Apt.	47,900	1,916.00	22.00	20	+50
Las Garzas	16	1-Bedroom Apt.	32,000	2,000.00			
U. Revolucion	18	1-Bedroom Apt.	36,900	2,050.00			
<u>COCLE</u>							
Las Delicias (II)	31	Single Family	185,300	5,977.42	36.00	63	-837
La Constancia	17	1-Bedroom Apt.	35,200	2,070.59	21.00	22	-17
La Libertad	10	1-Bedroom Apt.	22,000	2,200.00	21.00	23	-20

MIVI HOUSING PRODUCTION: 1978-1982

BY PROJECT, NUMBER OF UNITS, COST, THEORETICAL MONTHLY PAYMENTS, AND LOSSES OR GAINS

PROVINCE AND PROJECT 1978	SOLUTIONS NO.	TYPE	ESTIMATED INVESTMENT IN THOUSANDS OF BALBOAS	APPROXIMATE COST PER UNIT	APPROXIMATE MONTHLY PAYMENT	MONTHLY PAYMENT CALCULATED AT 12% FOR 25 YEARS	MIVI MONTHLY LOSS OR GAIN (BETWEEN ACTUAL CALCULATED PAYMENT)
<u>PANAMA</u>							
Los Libertadoras	240	Apartments	2,551,500	10,631.25	100.00	111	-2,640
Villa Gabriele	320	Apartments	2,891,800	9,036.88	88.00	99	-2,240
San Pedro 5 y 6	120	Apartments	1,138,400	9,486.67	99.00	100	-120
Santa Librada	50	Single Family	370,700	7,414.00	67.00	78	-590
Don Bosco	908	Single Family	11,511,100	12,677.42	119.00	134	-17,252
Cerro Batea 3	228	Single Family	947,100	4,153.95	34.00	44	-2,280
Cerro Batea 4	101	Single Family	419,500	4,153.47	25.00	44	-1,919
San Pedro #2	2	Single Family	20,100	10,050.00	99.00	106	-14
Monteria	175	Single Family	1,363,800	7,793.14	90.00	82	+1,400
Torrijos Carter	376	Single Family	1,753,700	4664.10	51.00	49	+752
Ruberto Duran	330	Single Family	896,400	2,716.36	50.00	29	+6,930
Pto. Calmito (I)	35	1-Bedroom Apt.	81,000	2,317.14	20.00	24	-140
Jfa. Villa Rosario	28	1-Bedroom Apt.	68,300	2,439.29	24.00	26	-56
CHÉPO	42	Home Improvement Loan	61,600	1,466.67	39.00	13	+1,008
PACORA	23	Home Improvement Loan	34,700	1,508.70	32.00	16	+368
<u>COLON</u>							
Nuevo Colon (I)	75	Single Family	583,000	5,106.67	90.00	54	-300
<u>VERAGUAS (Asentamientos)</u>							
El Porvenir (I)	41	1-Bedroom Apt.	84,500	2,060.98			
Victoriano Franco	28	1-Bedroom Apt.	75,100	2,682.14			
28 de Noviembre	12	1-Bedroom Apt.	26,100	2,175.00			
Renv. Campesina	20	1-Bedroom Apt.	43,600	2,180.00			
<u>CHIRIQUI</u>							
David II Etapa	60	Home Improvement Loan	61,100	1,018.33	13.00	11	+120
<u>LOS SANTOS</u>							
Sabana Grande	23	1-Bedroom Apt.	46,700	2,030.43	23.00	21	+46
Asentamiento 1° de mayo	10	1-Bedroom Apt.	21,100	2,110.00			
La Providencia	16	1-Bedroom Apt.	35,100	2,193.75			
J. Communal La Colorada	17	1-Bedroom Apt.	35,400	2,082.35	22.00	22	-0-

TABLE 12 (Continued)

NIVI HOUSING PRODUCTION: 1978-1982

BY PROJECT, NUMBER OF UNITS, COST, THEORETICAL MONTHLY PAYMENTS, AND LOSSES OR GAINS

PROVINCE AND PROJECT 1978	SOLUTIONS NO.	TYPE	ESTIMATED INVESTMENT IN THOUSANDS OF BALBOAS	APPROXIMATE COST PER UNIT	APPROXIMATE MONTHLY PAYMENT	MONTHLY PAYMENT CALCULATED AT 12% FOR 25 YEARS	NIVI MONTHLY LOSS OR GAIN (BETWEEN ACTUAL CALCULATED PAYMENT)
<u>BOCAS DEL TORO</u>							
Aisrante	17	Single Family	132,600	7,800.00	43.00	82	-663
Bocas del Toro	15	Single Family	103,700	6,913.33	34.00	73	-195
J. C. de Bastimentos	15	1-Bedroom Apt.	149,700	9,980.00	46.00	105	-883
<u>HERRERA</u>							
Union Campesina	29	1-Bedroom Apt.	59,400	2,048.27	-	-	-
Jta. Comunal Pese	35	1-Bedroom Apt.	81,700	2,334.29	27.00	25	+70
El Agallito	21	1-Bedroom Apt.	34,800	1,657.14	19.00	17	+42
Jta. Comunal Parita	25	1-Bedroom Apt.	47,900	1,916.00	22.00	20	+50
Las Garzas	16	1-Bedroom Apt.	32,000	2,000.00	-	-	-
U. Revolucion	18	1-Bedroom Apt.	36,900	2,050.00	-	-	-
<u>OCCLE</u>							
Las Delicias (II)	51	Single Family	165,300	3,243.14	36.00	83	-837
La Constancia	17	1-Bedroom Apt.	35,200	2,070.59	21.00	22	-17
La Libertad	10	1-Bedroom Apt.	22,000	2,200.00	21.00	23	-20

TABLE 12 (Continued)

MIVI HOUSING PRODUCTION: 1978-1982

BY PROJECT, NUMBER OF UNITS, COST, THEORETICAL MONTHLY PAYMENTS, AND LOSSES OR GAINS

PROVINCE AND PROJECT 1979	SOLUTIONS NO.	TYPE	ESTIMATED INVESTMENT IN THOUSANDS OF BALBOAS	APPROXIMATE COST PER UNIT	APPROXIMATE MONTHLY PAYMENT	MONTHLY PAYMENT CALCULATED AT 12% FOR 25 YEARS	MIVI MONTHLY LOSS OR GAIN (BETWEEN ACTUAL CALCULATED PAYMENT)
<u>PANAMA (1979)</u>							
San Cristobal	17	Single Family	155,200.00	9,129.41	178.00	96	+1,394
Chepo	2	1-Bedroom Apt.	4,800.00	2,400.00	27.00	25	+4
Villa Gabriela	160	Apartments	1,445,900.00	9,036.88	84.00	95	-1,760
Cabo Verde I	70	Apartments	335,200.00	4,760.00	23.00	50	-1,790
San Pedro No. 2	19	Single Family	161,700.00	8,510.53	71.00	90	-361
Torrijos Carter	1,174	Single Family	62,222.00	5,300.00	59.00	56	+3,522
Roberto Duran	209	Single Family	671,100.00	3,211.00	49.00	34	+3,135
Cerro Batea	6	Single Family	28,800.00	4,800.00			
Nvo. Pto. Calisto 2	35	1-Bedroom Apt.	70,000.00	2,000.00	22.00	21	+35
Chapo	33	Home improvement Loan	56,800.00	1,721.21	27.00	18	+297
<u>CHIRIQUI (1979)</u>							
Paraiso II	25	Single Family	170,000.00	6,800.00	57.00	72	-375
Boqueron	31	1-Bedroom Apt.	62,000.00	2,000.00	25.00	21	+124
<u>LOS SANTOS (1979)</u>							
Macaracas	11	1-Bedroom Apt.	25,900.00	2,172.73			
Colon (1979)	66	Single Family	702,500.00	10,643.94			

TABLE 12 (Continued)

NIVI HOUSING PRODUCTION: 1978-1982

BY PROJECT, NUMBER OF UNITS, COST, THEORETICAL MONTHLY PAYMENTS, AND LOSSES OR GAINS

PROVINCE AND PROJECT 1980	SOLUTIONS NO.	TYPE	ESTIMATED INVESTMENT IN THOUSANDS OF BALBOAS	APPROXIMATE COST PER UNIT	APPROXIMATE MONTHLY PAYMENT	MONTHLY PAYMENT CALCULATED AT 12% FOR 25 YEARS	NIVI MONTHLY LOSS OR GAIN (BETWEEN ACTUAL CALCULATED PAYMENT)
<u>PANAMA (1980)</u>							
Cabo Verde 2	100	Apartments	451,500.00	3,225.00	25.00	34	-1,260
San Pedro 2	6	Single Family	42,500.00	7,083.33	77.00	75	+12
Torrijos Carter	110	Single Family	583,000.00	5,300.00	52.00	56	-440
Don Bosco	100	Single Family	971,100.00	9,711.00	83.00	102	-1,900
Robert Duran	260	Business Lots	491,700.00	1,891.15	52.00	20	+8,320
<u>VERAGUIAS (1980)</u>							
Espejo La Soledad	15	1-Bedroom Apt.	37,200.00	2,480.00			
El Florentino	25	1-Bedroom Apt.	54,100.00	2,164.00			
<u>HERRERA (1980)</u>							
Los Caneles	16	1-Bedroom Apt.	19,500.00	1,026.32	25.00	11	+224
<u>CHIRIQUI (1980)</u>							
Paraiso (III)	30	Single Family	166,800.00	5,560.00			
La Riviera (I)	25	Single Family	159,500.00	6,380.00			
Villa del Indio	16	Home Improvement Loan	8,500.00	531.25			
<u>COLON (1980)</u>							
Colon-Calle 6	96	Apartments	919,246.08	9,575.46	80.00	101	-2,016
Rio Alejandro	95	Home Improvement Loan	100,000.00	1,052.63	16.00	11	+475

TABLE 12 (Continued)

NIVI HOUSING PRODUCTION: 1978-1982

BY PROJECT, NUMBER OF UNITS, COST, THEORETICAL MONTHLY PAYMENTS, AI'S LOSSES OR GAINS

PROVINCE AND PROJECT 1981	SOLUTIONS		ESTIMATED INVESTMENT IN THOUSANDS OF BALBOAS	APPROXIMATE COST PER UNIT	APPROXIMATE MONTHLY PAYMENT	MONTHLY PAYMENT CALCULATED AT 12% FOR 25 YEARS	NIVI MONTHLY LOSS OR GAIN (BETWEEN ACTUAL CALCULATED PAYMENT)
	NO.	TYPE					
<u>COCLE (1981)</u>							
Las Delicias (III)	36	2-Bedroom Apt.	236,500.00	6,569.44	59.00	69	-360
Pozo Azul (I)	25	2-Bedroom Apt.	175,700.00	7,028.00	45.00	74	-667
Prestamo Sup.	17	Home Improvement Loan	3,900.00	299.41			
<u>COLON (1981)</u>							
Multifamiliar M-110 Nvo. Colon #2	36 100	2-Bedroom Apt. Basic Unit	320,700.00 600,000.00	8,017.50 6,000.00			
<u>CHIRIQUI (1981)</u>							
Paraiso (III)	25	2-Bedroom Apt.	139,000.00	5,560.00	63.00	59	+100
La Riviera (II)	25	2-Bedroom Apt.	160,000.00	6,400.00			
Prestamo Sup.	6		3,500.00	583.33			
<u>HERRERA (1981)</u>							
Parita II Etapa	32	2-Bedroom Apt.	87,400.00	2,731.25	38.00	29	+288
Las Fenitas	25	2-Bedroom Apt.	170,400.00	6,816.00	78.00	72	+150
Prestamo Sup.	3		2,100.00	700.00			
<u>LOS SANTOS (1981)</u>							
Sta. Librada #2	25	2-Bedroom Apt.	212,400.00	8,496.00			
Prestamo Sup.	7		2,300.00	328.57			
<u>PANAMA (1981)</u>							
R.U. Cabo Verde N y V	126	Basic Apt.	639,900.00	5,078.57	25.00	53	-728
Don Bosco	24	2-Bedroom Apt.	162,000.00	6,750.00	126.00	71	+1,320
Torrijos Carter	100	Basic Unit	500,000.00	5,000.00	62.00	53	+900
Robert Duran	464	Floor-Roof	1,279,700.00	2,757.97	55.00	29	+12,064
Villa Esperanza	109	Home Improvement Loans	43,600.00	400.00	27.00	4	+2,507
Prestamo Sup.	10		14,600.00	1,460.00			
<u>VERAGUAS (1981)</u>							
Sona	38	Lots	53,500.00	1,407.89			
Prestamo Sup.	6		10,600.00	1,766.67			

TABLE 12 (Continued)

MIVI HOUSING PRODUCTIONS: 1976-1982

BY PROJECT, NUMBER OF UNITS, COST, THEORETICAL MONTHLY PAYMENTS, AND LOSSES OR GAINS

PROVINCE AND PROJECT 1982	SOLUTIONS		ESTIMATED INVESTMENT IN THOUSANDS OF BALBOAS	APPROXIMATE COST PER UNIT	APPROXIMATE MONTHLY PAYMENT	MONTHLY PAYMENT CALCULATED AT 12% FOR 25 YEARS	MIVI MONTHLY LOSS OR GAIN (BETWEEN ACTUAL CALCULATED PAYMENT)
	NO.	TYPE					
<u>CHIRIQUI 82</u>							
Tijera	20	2-Bedroom Apt.	52,727.83	2,636.39	30.00	28	40
Mi Dulce Hogar	48	2-Bedroom Apt.	155,862.89	3,247.14	37.00	34	144
Volcan	22	2-Bedroom Apt.	51,938.00	2,360.82	39.00	25	308
Loma Colorado	603	Residential Lots	186,702.07	309.62	18.00	3.25	8,894.25
<u>VERAGUAS 82</u>							
Juan XXIII	20	2-Bedroom Apt.	57,311.51	2,865.58	33.00	30	60
<u>HERRERA 82</u>							
La Penita	25	2-Bedroom Apt.	171,475.02	6,859.00	78.00	72	150
<u>PANAMA 82</u>							
R. U. Chorrillo	160	Apartments B (1+1)	1,127,243.84	7,045.27	52.00	74	-3,520
R. U. Chorrillo	60	Apartments A (1+1)	421,609.36	7,026.82	52.00	74	-1,320
R. U. Chorrillo	12	Apartments A (1+1)	93,004.44	7,750.37	52.00	82	-360
R. U. Santa Ana	96	Apartments A (1+1)	674,980.80	7,031.05	52.00	74	-2,112
R. U. Santa Ana	120	Apartments B (1+1)	845,432.88	7,045.27	52.00	74	-2,640
R. U. Santa Ana	280	B. L. #2	2,552,646.05	9,116.59	75.00	96	-1,575
R. U. San Miguel	26	Apartments A (1+1)	182,426.84	7,016.42	52.00	74	-752
R. U. San Miguel	28	Apartments A (1+1)	184,409.92	6,586.07	52.00	69	-476
R. U. San Miguel	72	Apartments C (1+1)	471,509.04	6,548.74	52.00	69	-1,224
R. U. San Miguel	24	Apartments D (1+1)	153,951.60	6,414.65	52.00	68	-384
R. U. San Miguel	80	B. L. #2	729,327.50	9,116.59	75.00	96	-1,680
R. U. Curundu	96	Apartments A (1+1)	674,980.80	7,031.05	52.00	74	-2,112
R. U. Curundu	80	Apartments B (1+1)	563,621.92	7,045.27	52.00	74	-1,760
R. U. Curundu	24	Apartments C (1+1)	157,169.68	6,548.74	52.00	69	-408
R. U. Llano Bonito	96	Apartments A (1+1)	899,974.40	9,374.73	52.00	99	-4,512
R. U. Llano Bonito	100	Apartments B (1+1)	704,527.40	7,045.27	52.00	74	-2,200
Victoriano Lorenzo	32	Apartments A (1+1)	289,914.04	9,058.81	52.00	95	-1,376
Victoriano Lorenzo	24	Apartments C (1+1)	224,287.32	9,345.31	52.00	98	-1,104
Torrijos Carter	395	Basic Unit	2,466,956.70	6,245.46	72.00	66	+2,370
Torrijos Carter	80	Basic Unit	452,378.40	5,654.73	65.00	60	+400
Torrijos Carter	46	Basic Unit	348,668.04	7,579.74	80.00	80	-0-
Torrijos Carter	116	Basic Unit	806,688.36	6,954.21	87.00	73	+1,624
Roberto Duran	474	Floor-Roof	3,370,429.82	5,861.62	67.00	62	+2,370

What appears from the figures is that households paying for "piso-techo" units and basic units are paying more than they ought to every month, by as much as twice, and that people in the urban renewal units are paying far less than they ought to, by as little as half. In other words, the lowest income households are providing cross-subsidies to the higher income ones in terms of MIVI's monthly cash flow. As MIVI's list of monthly payments by unit type is incomplete, it is not possible to calculate with any surety whether their entire cash flow is negatively affected by this arrangement, or whether it is solely individual families who are adversely affected.

a. Financing of Urban Renewal Units

Beneficiaries of the urban renewal units may choose from various alternatives to finance their homes, depending on their needs: they may choose to put up a downpayment on their unit equivalent to 5 percent of the total value; they may choose a conventional financing system wherein they pay a constant monthly sum for a period of 25 years at 12 percent annual interest; or they may choose a progressive monthly quota, during which they may have a reduced payment for the first ten years, and an increased payment starting in year 11. They may also choose to pay an initially higher payment

monthly, with the idea of reducing it later; or they may choose to pay for additional months of rent at any time they choose during the payment period to cancel their debts earlier than originally programmed. Whatever the method of payment, 100 percent of the original capital investment will be paid off within 25 years.

b. Subsidy of Units

Costs of Phase I and II of the Urban Renewal Program may be broken down in the following manner:

Investment by AID	\$12,676,751.13
Investment by GOP	<u>3,169,187.79</u>
Sub-Total	\$15,845,938.92

In addition to the direct investment above, which will be paid back by recipients of the housing, the Ministry of Housing is subsidizing the cost of the project at a rate of \$4,482,514.27. This sum is composed of two components:

Price of Land	\$ 3,112,732.47
Infrastructure Costs	<u>1,369,781.80</u>
Sub-Total	\$ 4,482,514.27

The land and infrastructure will remain permanently in the Ministry's portfolio, the beneficiaries having use of the land for 99 years, by means of a symbolic payment of \$1 annually. The Ministry's investment is considered by that agency as a means of augmenting its credit capacity, and a way of gaining flexibility for re-use of the land when the buildings become obsolete.

In fact what the Ministry has done is lost the option for re-use of its land for all practical purposes, lost its almost \$5 million investment, and lost the opportunity to gain revenues on the land which could be reinvested in more infrastructure and housing to assist other low-income groups.

With reduction of standards, units could be made to be affordable to the target population at unsubsidized prices. Structural changes in urban renewal units could include elimination of single loaded corridors, elimination of the second story loft, and accompanying overbuilding of the super-structure.

Thus MIVI provides two subsidies to beneficiaries of urban renewal units: The first through its payments scheme, the second directly through not including land cost in selling price.

c. Planning in the Urban Renewal Areas

Perhaps MIVI's most impressive planning effort to date has been in the urban renewal areas in its "Documento de Factibilidad y Ejecucion Sub-Programa: Renovacion Urbana de la Ciudad de Panama", 1982. The document first traces the evolution of urban renewal in Panama. The purpose of the current program is to provide secure, comfortable and clean housing to low-income families who reside in the area, maintaining community ties, access to work and facilities.

A high quality diagnostic or analytic sections follows, looking at the physical characteristics of the neighborhoods, and social and economic characteristics of residents. An analysis is then made of demand and ability to pay. Sub-programs are formulated, a housing investment plan set forth in detail, a system established for mortgage financing and special projects identified and costed.

Three criticisms can be made. The first is the need to include funds for relocating existing neighborhood commercial establishments - first, because the owners are equally as poor as the residents who are to be relocated and equally as needed; second, because occupants of the new buildings need as much access to such services as they did in their former

location; and third, because the businesses already have their established set of clients within the community. The second change is the need to make more detailed and rigorous studies of the impact of elevating population densities on the existing service systems - especially water and sewer. The third is the need to cost the units at a realistic price, and to change element standards to make the units affordable at market value.

d. **MIVI Construction of Units**

Within the last few years, all MIVI units have been built by the private sector in the Panama City area. A large group, in the range of 40, competent construction contractors, has emerged as a result. In the countryside, MIVI still occasionally uses its own staff to build its projects, principally due to a lack of qualified private companies. Projects are costed in advance by the architect and engineering section. Real cost accounting is a problem, however, which might partially be solved through computerization and regularization of such data.

Solutions -- sites and services, units, loans -- are sold or distributed on the basis of receipt of solicitudes. MIVI has had little trouble "selling" most products with the exception

of the sites and services program in Robert Duran. Here the problem proved to be a marketing one rather than lack of demand for the product. MIVI is responsible for collection of rents or mortgage payments. Arrears are slight. Buildings which remain in MIVI ownership are maintained by them. Sold units are naturally the responsibility of the owner-occupant.

MIVI's production of units has been uneven over the years. 1982, however, was a productive year, and there are hopes that the high levels achieved last year can be sustained over the next few years. The increased production can be attributed, in part, to the institutional reorganization which took place that year.

A commonly voiced criticism is MIVI's lack of ability to stick with its original proposals if the solutions being offered are simple. MIVI apparently has a tendency to over-build its solutions, adding on more features than specified in the original plans. Such over-building raises the final selling price and slows down production.

Another problem is related to both cost overruns and environmental problems. MIVI's tendency in the past has been to level its building sites, removing all topographic features and all vegetation. The result in the Colon project, for

example, has been a lunar landscape within the middle of a forest. Cost overruns on the Colon project attributable to site preparation alone have been estimated to be in the order of \$6 million. The newly-appointed director of the Planning Division, however, is a staunch environmentalist and has vowed to see that such abuses do not continue into the future.

The third major problem is the need to shift production from higher cost to lower cost solutions, in order to more fully meet the needs of the target population; to eliminate subsidies in the urban renewal units; and to regularize the rate structure for monthly payments to reflect the actual costs of the units. A problem with MIVI is not so much the lack of funds for housing production, although more funds would obviously be of benefit, as a lack of good management of the funds in terms of the types and costs of solutions produced.

2. Regulatory Functions

MIVI directly controls urban development in the country through its function of originating, directing and regulating the "planes reguladores" -- specifying where urbanization may take place, zoning, lotification, issuing of zoning maps. It undertakes these functions either alone or in consultation with the municipality to be affected. All planning is centralized in the Panama City office.

Execution of the plans in the hands of the Municipios. MIPPE is responsible for approving public investments. According to MIVI, these functions are carried out as specified in an appropriate manner. This study was unable to verify whether this so or not.

a. Subdivisions and Urbanizations

In 1980 MIVI staff wrote the "Reglamento Nacional de Urbanizaciones y Parcelaciones" in concert with the Real Estate Division of their own agency, the Panamanian Society of Engineers and Architects, CAPAC (the national construction trade organization), and other private agencies. MIVI's willingness and ability to carry out a joint private-public sector task which is often undertaken without such external input, provides a good example of informal coordination. Unfortunately, due to numerous changes in leadership at the top of MIVI, the plan has not yet been officially adopted, and as the plan lacks the weight of law, MIVI staff can only suggest to developers that they comply with the regulations, but cannot legally insist that they do so. An old law stands on the books which is the deciding factor in the case of recalcitrant developers.

The width of street rights-of-way is determined by a set of standards set forth in a MIVI publication, "Normalizacion de

las Servidumbres Viales," published in 1980. Principle inter-urban streets must have a right-of-way of 20 meters to 25 meters; collector streets are 15-16 meters; asphalted local streets are 12 to 13 meters; local streets with a concrete covering are 10 meters; pedestrian paths are 3-5 meters.

Both the standards for zoning and for streets rights-of-way seem reasonable, that is not excessive in terms of their adding unnecessary costs to the price of urbanization.

b. Zoning Codes and Maps

A Zoning Code and Map for Panama City and most other cities of a major size are prepared by MIVI staff. The general outlines for what zoning should be at a particular location is discussed in advance with the affected municipality. Private developers argue their cases for higher zoning here as in most areas of the world. Zoning enforcement is up to MIVI. However, MIVI is definitely opposed to taking a strong stand against squatters, and in fact goes out of their way to help them regularize these de facto communities. Thus, irrespective of zoning, squatters often have their way.

The new standards for urban growth for the Panama City ("Normas de Desarrollo Urbano Para La Ciudad de Panama." Ministerio de Vivienda, Panama, 1979) were published in 1979.

Generally they have legitimized previously unauthorized densification of residential use; allowed more commercial establishments to be mixed with residential use; expanded use of small workshops in residential areas. Lots have generally become smaller. The new norms have four main classifications:

- Low Density Residential (R-AG, R-E, R-1 and R-2)

R-AGR: mixed single family and farming allows 5 houses/hectare.

R-E: minimum lot size is 160M² for single family, 150M² for two-family, and 120M² for row housing; 80 units/hectare.

R-1 now allows two-family dwellings as well as single family. Minimum lot size is 600 M²; 40 units/hectare.

R-2 allows row housing and multi-family housing in the zone; 80 units/hectare. 600 M² minimum lot size for duplexes; 300 M² minimum for row housing (max. 2 units); and 200 M² for single family.

- High Density Multi-Family Housing (RM-1, RM-2, RM-3)

Only multi-family units are permitted in these zones.

RM-1: 150 units/hectare; 600M² minimum lot size.

RM-2: 200 units/hectare; 800M² minimum lot size; commercial on bottom floor.

RM-3: 300 units/hectare; 800M² minimum lot size offices and commercial use permitted.

- Commercial Zones
- Industrial Zone

None of the residential zoning regulations, except the R-AGR found in the countryside, are so strict as to make housing plot sizes unaffordable for the target population.

Special norms have been developed for the urban renewal areas: lot area may be 10 percent smaller; parking requirements may be waived; side and rear setbacks are not required. The bulk of the renewal area land is zoned RM-1 and RM-3.

c. Building Inspections

Building inspections fall within the purview of the local municipality's Engineering Office, and MIVI only involves itself in these matters when they are the owner of a building. In these cases, they do their own inspections.

3. Micro or Small Area Planning

The decision to prepare a plan for an area originates in the larger studies written by MIPPE or is generated in-house by MIVI. Planning has followed a rather conventional path, through the execution of plans which are wholly physically oriented, specifying general land use concepts, zoning to reflect the desired pattern of growth, elaboration of a circulation system to serve the already developed and planned-to-be-developed areas, specifications of street rights of way and paving widths, specifications for subdivision layouts, lot size and standards, (i.e., setbacks, floor area ratio, allowable densities), location of community facilities, specification for location and development of industrial and commercial uses, park locations, etc. Technically the plans are good, given the rather limited number of things they try to do.

Implementation of plans is a joint responsibility shared by MIVI, for seeing that that zoning regulations are followed, by the sectoral agencies for seeing road widths, infrastructure, and the like are put in according to plan, and by the municipalities affected in respect to issuance of building permits.

4. National Housing Policy

MIVI does not have a formally stated housing policy other than that found in its enabling legislation, Article 109 of the Constitution

and Ley 9, January 25, 1973, wherein the Ministry was created to establish, coordinate, and assure 1) the execution of a national housing policy and 2) an urban development policy destined for the enjoyment of all, and in particular, the low-income sector.

Portions of MIVI's housing policy may be discerned from various studies under its tutelage. For example, the "Feasibility Studies in the Urban Renewal Areas of Panama City, 1982", state that the purpose of the study is to enlarge opportunities for access to housing, and especially to give priority to low-income households; to create financing systems which allow more families to have access to a decent and dignified dwelling place; to reduce the cost of housing, and in light of the fact that the state has insufficient funds, to help do so through mutual help, self-help and supervised help; to improve the quality of life; to encourage private sector participation; to increase urban renewal programming; and to consolidate activities in the lesser centers and rural areas. There is no overall country-wide housing plan however, nor one for the primate city of Panama City.

D. Problems and Recommendations

In the urban planning and development process there are several gaps. The first is the lack of basic plans -- a national urban development plan, a national housing plan, and a cohesive set of plans and policies

for Panama City. The absence of such basic elements makes it impossible to plan sensibly over a short- or medium-range. The result is that plans are prepared on an ad hoc basis, often failing to relate one to the other, and while the smaller area plans are quite good in themselves, the lack of a context hampers their eventual utility.

The second gap is the absence of a structure which would help to bind the aforementioned elements together -- lack of definition, responsibility, authority, and coordination between the public institutions engaged in planning. Neither MIVI or MIPPE, for example, want responsibility for planning for the metropolitan region of Panama City. Management within MIVI itself is improving, however, due to the recent structural changes, and appears to be headed in the right direction.

The third gap is a failure of those engaged in planning to recognize the importance of economic imperatives in their work. More attention to economic possibilities and limitations would result in more finely-honed and reasonable plans. As well, there is a lack of definition of national and city-wide priorities for investment and maintenance in physical infrastructure and services based on economic guidelines.

While the planning process has managed to get along without inordinate difficulties in the past, it may be forced to face large problems rather shortly, because of the need to deal with the reverting lands of the Canal Zone. It would be tragic to waste the resource the Reverted Lands

represents through failure to connect the development of these lands with those of the Panama City and Colon Metropolitan area or country-wide development as a whole.

1. MIVI should make its housing policy and programming explicit -- to benefit its own staff, new ministers as they come in, other governmental institutions, the General Assembly and the public. It needs to produce a philosophical statement about where it is now and where it wants to go over the next few years. It should elaborate a five year program of production targets by number, cost and type of unit, group to be served, location of units (urban-rural) and priorities. This work should be undertaken principally by MIVI itself, but some useful technical assistance can be offered by affordability modeling. PADCO suggests that the Bertaud Model be used to help clarify budgetary parameters to housing production. MIVI should be in charge of making the substantive decisions.
2. Work should continue on the definition of housing demand. Use of the new computer will help with regularization of internal bookkeeping of records and report production. Computer capability is useful not only in these fields, but also in keeping track of construction costs, finances, and cash-flow. Technical assistance should be given to help establish an information system and train staff to use it.

3. A full examination should be made of the consequences of providing subsidies to the urban renewal units. Actual cost of units should be calculated and monthly payments adjusted to reflect the reality. Much greater emphasis should be given to delivering less costly, more appropriate solutions to serve the target group.
4. MIVI should re-examine its building standards and the consequent cost of its solutions in the urban renewal area, as well as other areas of the country, and shift program emphasis from the construction of completed solutions of whatever quality to more basic solutions and sites and services. If MIVI continues to provide solutions at current levels, the country is likely to be unable to afford the subsidies required, and fewer households will gain access to housing.
5. In the field of urban development, MIVI could greatly benefit from a short-term technical assistance program to develop an Urban Development Assessment, U.D.A. Preparation of U.D.A. will lead to adoption of an urban development strategy and answer which areas in the settlement system should be given priority; which sectoral policies and programs should be emphasized; which institutions and decision-makers should be directly involved in policy and program initiatives to increase effective implementation of the strategy. The execution of a U.D.A. will typically require between two and

four calendar months and between three and four person-months of technical effort. The typical technical assistance team should consist of a combination of the following expertise: an urban economist with macro-economic skills; an urban planner; an urban management specialist with knowledge of urban institutions, urban management and urban finance; and a research assistant with basic analytic skills.

6. This report recommends the establishment of a Panama City Metropolitan Area planning unit, composed of a macro-economist from MIPPE, a regional planner from MIPPE, an urban planner from MIVI, an infrastructure-finance specialist from MIVI, and a land economist-real estate specialist familiar with the Panamanian economy. This unit would be the planning team for the Reverting Areas of the Canal Zone, and could later form the nucleus of a permanent Panama City Metropolitan Planning Area Team. For more detailed information, see recommendations under Planning for the Reverting Areas.
7. The Phase 1 HG-011 financed units in the urban renewal areas did not set aside money for relocation of existing neighborhood commercial establishments. This has proved to be a hardship both to owners of such businesses and to the relocated families who lack nearby services. Future HG programming should allow for commercial relocation as well as residential relocation.

III. THE MINISTRY OF PLANNING AND ECONOMIC POLICY (MIPPE)

A. Inception and Purposes

The Ministry of Planning and Economic Policy (Ministero de Planificacion y Politica Economica, MIPPE) is a national level ministry, created by Law No. 16 on the 28th of February, 1973. Its charge is to "plan, coordinate and orient the economic and social growth of the country so that, through the rational and most intensive use of resources, strengthening and diversification of production and regional growth, national wealth and income will increase to benefit all the country's inhabitants". The law delegated to MIPPE the following functions:

1. The preparation of national plans for economic and social growth, of short-, medium- and long-range, which include and are in harmony with regional and sectoral plans;
2. To participate in the design and formulation of economic and social policies, in accord with the direction established by the President of the Republic, and in collaboration with other state entities, and to coordinate programs deriving from these policies at the national, sectorial, regional and local levels;
3. To direct the public sector budget through budget preparation, its financial and fiscal execution, accounting, control, evaluation, coordination and liquidation of the budget and its programs;

4. To orient and execute plans relating to administration and personnel and to offer advice to the other public sector organizations;
5. To manage and negotiate previously authorized plans for external financing necessary to execute projects; and to prepare, coordinate and evaluate foreign technical assistance.
6. In addition, under Law 19 passed the same day, MIPPE was given the power to do technical economic feasibility studies for investment of the "Fondo de Pre-Inversion".

The range of powers given to MIPPE is extensive as can be seen from the foregoing. Due to the concentration of planning and budgeting functions within the same agency, it is a potentially strong and influential force in the programming and coordinating of economic and physical policies and programs.

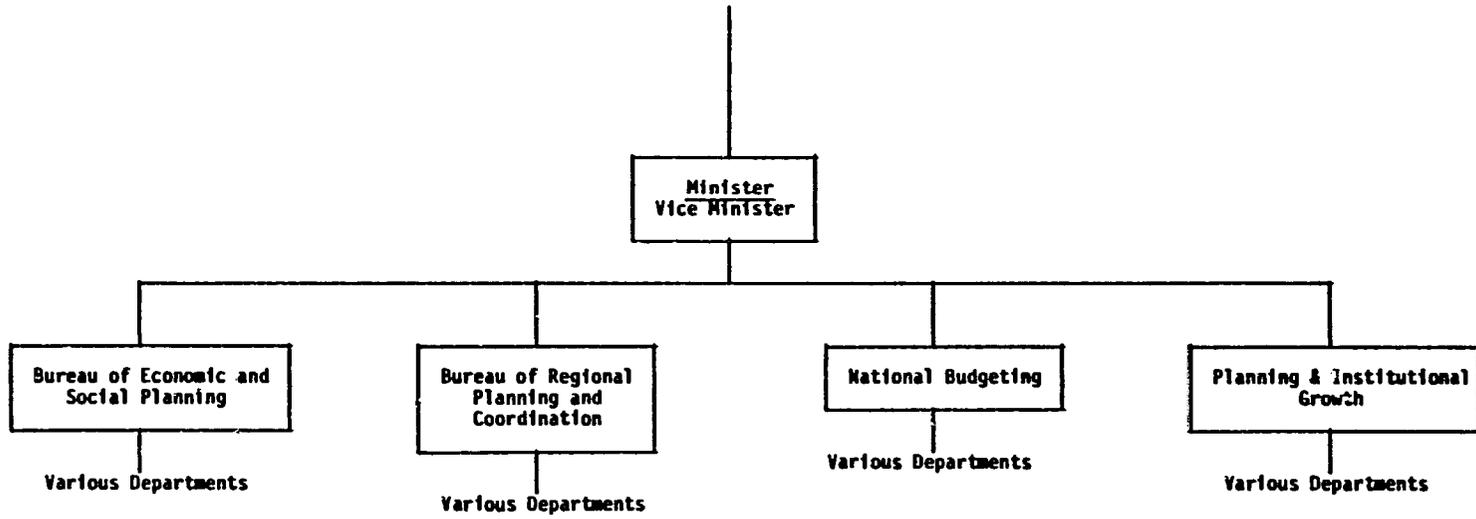
B. Organization and Staffing

MIPPE carries out its functions through four major bureaus (see organization chart, Table 13):

- (1) The Bureau for Economic and Social Planning defines general policies for the country, and prepares medium range budget plans (3-5 years).
- (2) Based on these plans, the Bureau for the National Budget prepares the country's budget.

- (3) The Bureau of Regional Planning and Coordination formulates regional plans, generally focusing on land use, in collaboration with other MIPPE bureaus and the regionally established Provincial Coordinating Councils. On each Provincial Coordinating Council sits (a) representatives of the Wards (corregimientos), the governor of the province, the head of the regional military zone and the local mayors, (b) a technical committee made up of representatives from the Water and Sewerage Institute (IDAAN), the Institute of Hydraulic and Electrical Resources (IRHE) and other sectoral agencies, and (c) a technical staff provided by MIPPE.
- (4) The Bureau for Institutional Planning and Development handles internal institutional staffing and provides administrative direction to MIPPE.

TABLE 13
MINISTRY OF PLANNING AND ECONOMIC POLICY (MIPPE)
Organizational Chart (Simplified)



Under current law, MIPPE's annual public sector budget must pass for review before the Cabinet Council (Consejo de Gabinete), composed of the President, the Ministers of all major departments, and the Comptroller General. On April 25, 1983 there was a general referendum proposing major changes to the working of government. Part of the proposed changes include moving the budget review functions from the Consejo de Gabinete to the General Assembly. The General Assembly in recent years had confined its budget activities to a review of the preceding year's activities. Under the proposed change the General Assembly would assume a greatly enhanced role of review and approval of the up-coming year's appropriations.

Since 1973, the United Nations (UN) has assisted MIPPE's Bureau for Regional Planning and Coordination. The UN has provided a team of planners to MIPPE to carryout training for MIPPE staff. Four years of collaborative effort have produced a report: "A Medium- and Long-Term Strategy for Regional Development"; regional development plans which lay the framework for implementing the aforementioned regional development strategy; studies of ways to improve the GOP's institutional system at the regional level and involve local populations to a greater degree in the process of regional development; and data-gathering and analysis for two major development programs -- 1) integrated rural development (Agency for International Development, AID and Inter-Americas Development Bank, IDB financing) and 2) growth and services center development.

C. Functions

1. Physical planning within the agency is done within the Bureau for Regional Planning and Coordination. Over the years MIPPE, either alone or in concert with other agencies, has prepared a variety of national and regional plans. Almost all may be characterized as being strictly physically-oriented, traditional land use plans. The agency divides Panama into four regions: The Metropolitan Region, containing the two largest urban centers of Panama City and Colon; the Central Region, immediately west of the Metropolitan Region, containing Chitre and Los Santos; the Occidental Region, extending from the Central Region west to the border with Costa Rica including the city of David; and the Oriental Region, comprising all the land east of the Metropolitan Region and the city of La Palma.

2. The Bureau for Economic and Social Planning defines general economic policies for the country, a national growth plan and medium range budget plans. Based on these it is supposed to prepare annual operating plans, coordinated with national growth plans, which can be used as a base to formulate the public sector budget. It is also charged with preparing annual goals and action plans for employment. No clearly articulated growth or employment policy or medium-range budget has been prepared since 1980. It is informally

known that the Bureau supports strengthening of regional centers, in addition to direction of resources to Panama City and Colon.

3. The budgeting function is assigned to the Bureau for the National Budget. Although a hastily assembled budget was submitted to the Consejo de Gabinete in December 31, 1982 to be in compliance with the law, the fact is that the budget for 1983 was still being disputed as of April 1983, and resolution is not yet in sight.
4. Coordination between MIPPE and the semi-autonomous agencies of IDAAN and IRHE is excellent. All budget requests for new sewer and water service, and electrical service by the two agencies are reviewed by MIPPE on an annual basis.

D. State of the Art of Planning - Discussion of Major Plans

MIPPE is charged with preparing normative or goal-oriented plans for the development of urban centers and adjacent zones, and to participate and consult with MIVI and the Municipalities, in the preparation of regulatory plans for the distinct areas. These plans are not officially adopted but serve as general guides for growth and investment. Copies of the plans are distributed to MIVI, the provincial coordinating counsels, the sectoral providers of service, the local municipalities and other interested parties.

1. Country-wide Plans

One major report, produced in November 1980, was written with the help of representatives from Panama's major provinces, regions, and with United Nations staff. It is entitled "Strategic Options for Regional Growth of the Country: 1980-1990" ("Opciones Estrategicas Para El Desarrollo Regional del Pais: 1980-1990"). What distinguishes this report from others is that it attempts to pose choices for development based on emphasizing one or another sector of the economy. It poses three alternatives:

- Growth based on development of the country's transit and canal functions;
- Growth based on re-emphasis of the traditional non-metropolitan base, stressing self-sufficiency in food production for local consumption; and
- Growth based on development of mining and other export-oriented activities.

A major thread running through all three options is to reduce Panama's economic vulnerability on the outside world. Each economic alternative stresses development of different spatial elements and infrastructure within the country. But what the report fails to do is to clearly endorse one plan or another. And as the choice

of one option really precludes investment in the others for lack of resources, the report falls down. Similarly it offers some weakly worded options for coordination and reorganization, too weak in light of the fact that MIPPE actually has some power to connect policy with programming and budgeting.

2. Plans for the Metropolitan Area

Again, with the help of UN personnel, MIPPE undertook a "General Plan for Land Use: Metropolitan Region" ("Plan General de Usos del Suelo: Region Metropolitana") in 1980. The plan's purpose was to coordinate public and private action in terms of land use and expenditures for infrastructure; to help coordinate planning at various levels of government; and to propose actions to protect the environment. The plan offers no clear alternatives for growth nor an explanation why certain choices were made for designating a piece of land for one specific use.

While the plan concedes that large public investments will have to be made to make it work, it offers no suggestions as to possible costs of implementation, nor ideas as to a financing vehicle.

It gives overall approval to the institutional base now existent in its abilities to implement the plan, but also states the need for bolstering staff in the local agencies with responsibilities for permitting or licensing of construction activities and inspection.

It suggests that the government establish a Provincial Planning Group, Junta Provincial de Planificacion, with representatives from MIPPE, MIVI and the Vice-President of the Assembly of each province. This body would be responsible for approving all budget items with regional impact and approving detailed plans which arise out of the general plan. Daily management of plans, however, would be in the hands of the local authorities. Only proposals not consistent with the general plan would be reviewed by the Junta. This suggestion has not been carried through.

Plans for the Reverting Areas of the Canal Zone have been written by MIPPE. Discussion of these plans may be found in Section IV.

3. Plans for Panama City

A "Physical Guide for the Outlines of Urban Development in Panama City, Preliminary Document" ("Marco Fisico para los Lineamientos del Desarrollo Urbano de la Ciudad de Panama, Documento Preliminar"), was prepared by MIPPE with the help of a consultant in 1977. The plan describes a general concept of how the city should develop spatially, attempting to integrate the reverting areas into the scheme. It has been followed over the years with minor adaptations. Although nominally written by MIPPE, MIVI staff participated in its execution and it is as much the work of MIVI as any other institution. The plan is outdated, and given a general

lack of economic consideration and costing of solutions, cannot be considered very useful.

The most important recent land use and development plan for Panama City is a de facto prepared under MIPPE's guidance, by the Japan International Cooperation Agency, "The Urban Transport Study in Panama Metropolitan Area," First Report (Draft), Vol. 1, Executive Summary, May - September 1982. This study examines three alternative urban development patterns for the city, and chooses a "triangular development pattern" through the outward expansion of the Panama Urban Area and development of the reverting Canal Area lands. New commercial centers are to be established in the eastern part of San Miguelito and La Chorrera, industrial development is to occur in Tocumen, Albrook, Vacamonte and La Chorrera, and major new housing in Ancon East, San Miguelito, Arraijan and La Chorrera. Road investments are already being allocated to support this plan.

Little if any of the planning has been done within an economic context, with a vigorous examination of what Panama's capabilities are now to support funding of the various elements suggested in the plans, nor what their capacity will be in the future.

E. Problems and Recommendations

MIPPE clearly has not taken advantage of the opportunity which presents itself of organizing and integrating macro- and micro-economic physical planning within an economic planning framework. Its organizational structure allows it to do so, and puts it in a competitively advantageous position with respect to other agencies within the country. MIPPE has not prepared an up-to-date medium-range economic plan to guide both public and private investment. It has not prepared a yearly budget in a timely fashion. It remains to be seen whether the budget will, in fact, be in harmony with current plans or act as an organizing element for its own and other agency plans. Its Bureau of Planning and Regional Coordination does not, as a matter of course, integrate economic thinking into its general land use plans, making them weak and largely ineffective. In part, the above may be due to a lack of trained staff. A large group of its best staff went to work with the Panama Canal Commission when it was formed, and now that it has disbanded have not returned to MIPPE, supposedly for lack of competitive salaries.

Clearly, the organization structure within MIPPE is adequate, at least in its general outlines. Technical assistance through HG loans could well be applied to pursue the following tasks:

1. Technical assistance to the Bureau of Economic and Social Planning leading to formulation of a general economic plan and program to

guide growth and investment over the next few years. This should be based on a realistic appraisal of the macro-economic picture within the country. It is a pressing need in light of Panamanian acquisition of the former Canal Zone land, and what this resource represents in terms of potential investment opportunities, possible large sources of funds to the Treasury through sale of land, and shaping of the Panama and Colon Metropolitan areas through development of economically-based land use plans.

2. Technical assistance to prepare, with MIVI, an urban development assessment. This can and should be done within the context of planning for the reverted areas. For further discussion, see Section IV on reverting areas planning.
3. Reorganization of the Bureau for the National Budget to allow it to produce timely annual budgets.
4. Integration of regional physical planning with medium-range economic planning through assignment of a regional economist to the Bureau for Regional Planning and Coordination. In addition to placing land use plans within an economic context, such plans should include a general section of implementation: who will be responsible for implementing plans, policies, putting in infrastructure; what the timing of these improvements should be, i.e., a list of priorities; what the cost of these improvements

will be; possible sources of funds for improvements; what the impact will be on the local and national budgets. The purpose of this is to make planning realistic, and to coordinate the actions of agencies involved with implementation both within the regional and across sectoral lines.

5. Better coordination with MIVI in planning for Panama City.

IV. PLANNING FOR THE REVERTING AREAS OF THE PANAMA CANAL ZONE

A. Introduction

With the implementation of the Torrijos-Carter Treaty beginning 1979, an estimated 1,474 Km² of land which comprises the Panama Canal Zone will gradually pass from United States ownership into Panamanian ownership. The Canal has long been a bifurcating element in Panama, severing the eastern part of the country from the west, and causing the major port cities at either end, Panama City on the south or Pacific Coast, and Colon on the northern or Atlantic Coast, to develop scattered patterns of growth. With the reintroduction of these lands into the Panamanian economy and patrimony, a unique opportunity presents itself to the country to:

- Expand the land mass available for growth and development immediately adjacent to the principal cities;
- Expand the economic activities of the country, and add to the long-term wealth of the country through judicious use and sale of these lands. With careful management, the lands can literally become a land bank, a source of funds for the nation to be spent in whatever manner thought appropriate;
- Physically integrate the country as a whole.

See maps 1, 2 and 3 for location and categorization of the lands.

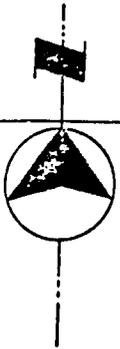
For summaries of the total hectares of land which will be reverting, by location, use and time, see Tables 14 and 15.

B. Control of the Lands

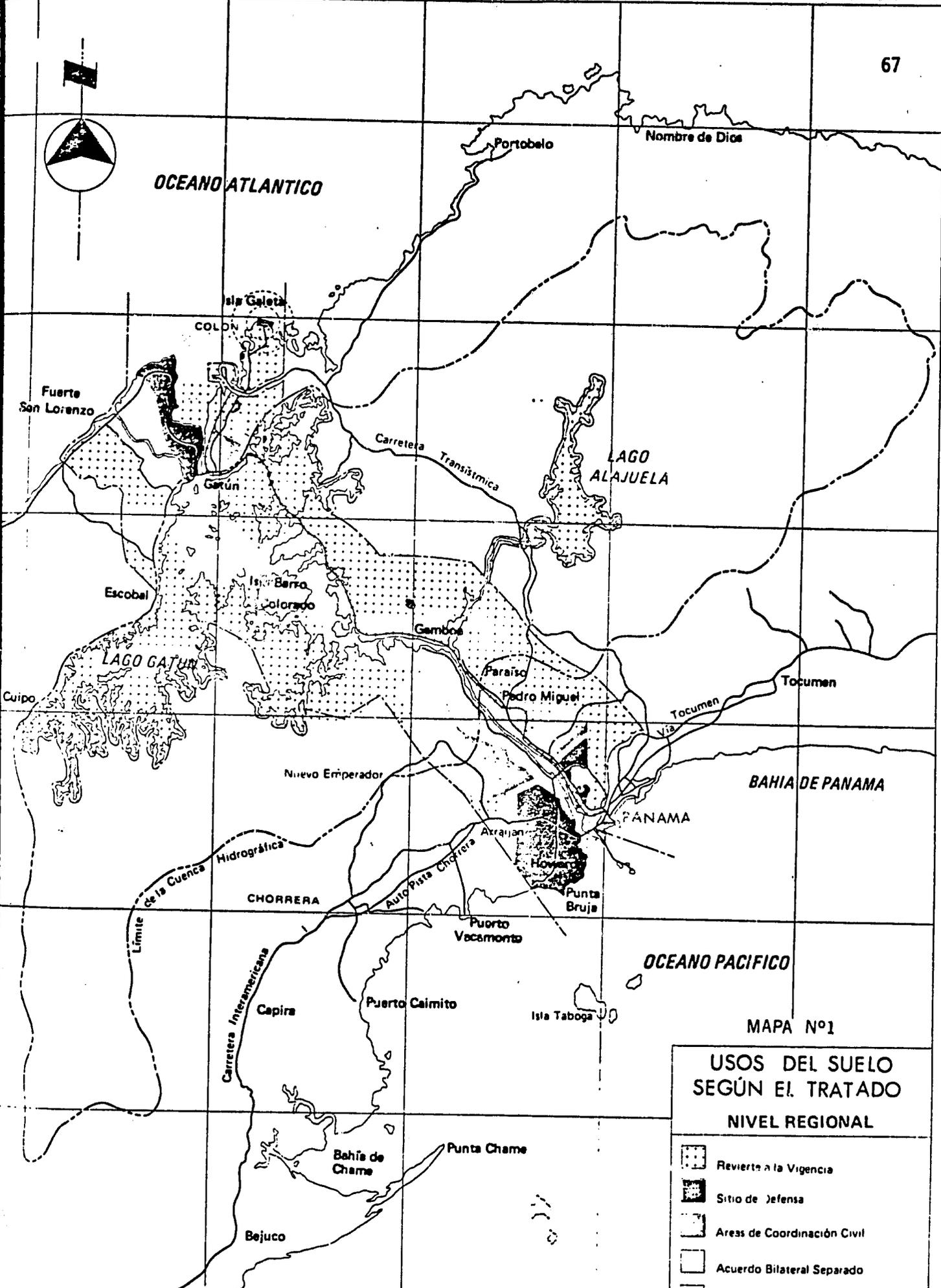
The Canal Treaty established timing and conditions for passage of the lands, water, installations and activities from the United States to Panamanian hands. Certain restrictions were placed on use of the lands. Lands necessary for the defense and operation of the Canal will remain in United States control. The Hydrologic Watershed (Cuenca Hidrografica), given its importance in production of water needed for operation of the Canal, generation of electricity and for future development of the area, is clearly defined. Only very limited development may occur within this area. For planning purposes the Canal has been divided into three areas: The Central, Pacific and Atlantic Sectors.

1. The Central Sector

All 96,352 hectares found in this sector are within the watershed, and includes Lakes Gatun and Alajuela, and the small town of Gamboa, whose labor force works at fixing boats and keeping the Canal channel clean. 66 hectares of Gamboa are subject to civil or Panamanian control.



OCEANO ATLANTICO



MAPA Nº1

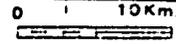
USOS DEL SUELO SEGÚN EL TRATADO NIVEL REGIONAL

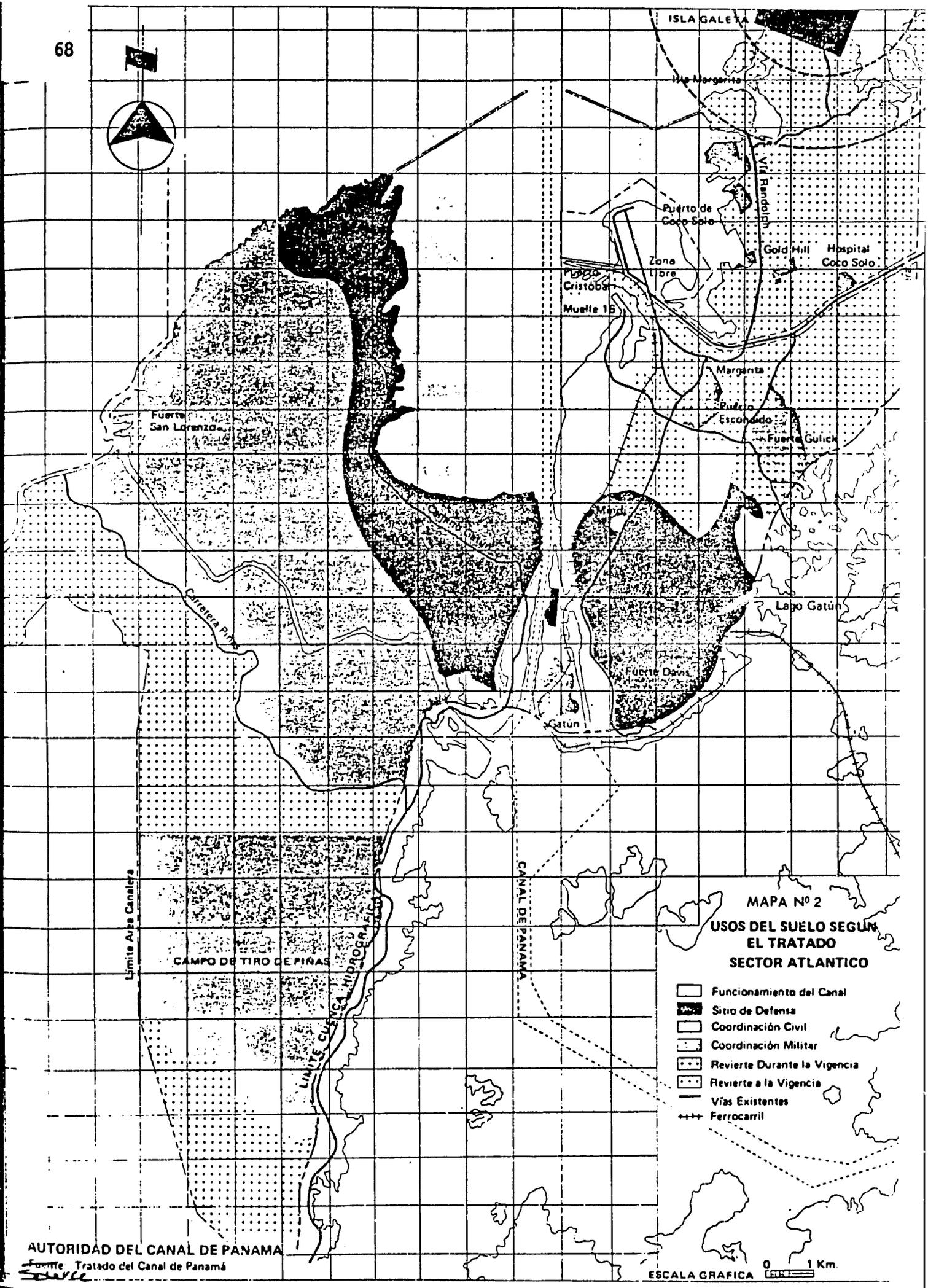
-  Revierte a la Vigencia
-  Sitio de Defensa
-  Areas de Coordinación Civil
-  Acuerdo Bilateral Separado
-  Areas del Funcionamiento del Canal
-  Areas de Coordinación Militar

AUTORIDAD DEL CANAL DE PANAMA

Fuente: Tratado del Canal de Panamá

ESCALA GRAFICA





MAPA Nº 2
USOS DEL SUELO SEGUN
EL TRATADO
SECTOR ATLANTICO

- Funcionamiento del Canal
- Sitio de Defensa
- Coordinación Civil
- Coordinación Militar
- Revierte Durante la Vigencia
- Revierte a la Vigencia
- Vías Existentes
- Ferrocarril

LÍMITE DE LA CUENCA HIDROGRÁFICA



Campo de Tiro de Emperador

CANAL DE PANAMA

Camino Chiva Chiva

Límite Área Canaliza

Fuerte Clayton

Corozal

Los Ríos

Diablo

Puerto de Balboa

Ancon

La Boca

Balboa

Farfan

Palo Seco

Fuerte Amador

Isla Naos

Isla Perico

Isla Culebra

Isla Flamenco

MAPA No 3

USOS DEL SUELO SEGUN EL TRATADO SECTOR PACIFICO

-  Funcionamiento del Canal
-  Sitio de Defensa
-  Coordinación Civil
-  Acuerdo Bilateral Separado
-  Coordinación Militar
-  Revierte Durante la Vigencia
-  Revierte a la Vigencia
-  Vías Existentes
-  Ferrocarril

0 1 Km.

ESCALA GRAFICA

AUTORIDAD DEL CANAL DE PANAMA

Fuente: Tratado del Canal de Panamá

Sevilla

TABLE 14
SUMMARY OF LAND IN THE REVERTING
AREAS BY TIME OF REVERSION

TIME OF REVERSION ¹	ATLANTIC SECTOR (HECTARES)	PACIFIC SECTOR (HECTARES)	CENTRAL SECTOR (HECTARES)	TOTAL (HECTARES)
Immediately Reverting	9,185.0	7,875.0	72,122.0	89,182.0
Between 6 - 30 Months	0.4	2.0	--	2.4
After 3 Years	0.1	36.0	60.0	96.1
After 5 Years	25.0	1.0	--	26.0
Time Not Specified	552.0	1,433.0	--	1,985.0
TOTAL	9,762.5	9,347.0	72,182.0	91,291.5

¹ Times are maximum; areas are able to revert before.

Source: "General Plan for Land Uses in the Panama Canal Area and Hydrographic Watershed," MIPPE, Panama, June 1980 ("Plan General del Usos del Suelo para el Area y la Cuenca Hidrografica del Canal de Panama," Ministerio de Planificacion y Politica Economica, Direccion de Planificacion y Coordinacion Regional, Republica de Panama, Junio de 1980).

TABLE 15

SUMMARY OF AREAS ACCORDING TO LAND USE SPECIFIED IN THE TORRIJOS-CARTER TREATY BY SECTOR

USE BY SECTOR	ATLANTIC (HECTARES)	PACIFIC (HECTARES)	CENTRAL (HECTARES)	TOTAL (HECTARES)
Functioning of Canal	2,296	6,073	19,117	27,486
Under Military Coordination	7,856	7,230	3,320	18,406
Under Civil Control	184	235	66	485
Defense Sites	3,785	6,290	175	10,250
Bilateral Accord	0	39	1,552	1,591
Reverting Areas	9,185	7,875	72,122	89,182
TOTAL	23,306	27,742	96,352	147,400

Source: "General Plan for Land Uses in the Panama Canal Area and Hydrographic Watershed," MIPPE, Panama, June 1980 ("Plan General del Usos del Suelo para el Area y la Cuenca Hidrografica del Canal de Panama," Ministerio de Planificacion y Politica Economica, Direccion de Planificacion y Coordinacion Regional, Republica de Panama, Junio de 1980).

2. The Atlantic Sector

This sector is found in the Province of Colon between the Continental Divide and the Atlantic Coast. The sector contains 23,306 hectares of which 9,185 hectares fully revert, and are classified as urbanized or available for urbanization. Map 2 shows the location of these lands with a dotted pattern.

3. The Pacific Sector

The 27,742 hectares in this sector (see Map 3) are located within Department of Panama. The lands which revert and offer possibilities for urban expansion are found immediately northwest of Panama City and much further north between Fort Clayton and Betania. Of the total hectares, 7,875 may be classified as urbanized or available for urbanization. These are again subdivided into 471 hectares which have already been developed in the area of the Port of Balboa, fuel depositories in La Boca, lands fronting into Avenida de los Martires and Gaillard Highway, the 193rd Bridgade in Fort Amador and the towns of Para iso and Pedro Miguel.

Unoccupied urbanized areas totalling 291 hectares may be found by Albrook Airport, Ancon Hill, Curundu, the offshore islands of Naos, Flamenco, Culebra and Perico, and part of the lands fronting on the Avenida de los Martires. 7,114 hectares are available for

urbanization but have no infrastructure. The rest of the reverting lands are restricted as to their use, either for military or defense reasons, or are subject to a bilateral accord separation.

C. Planning in the Reverting Areas of the Canal Zone

Planning in the reverted areas has passed from the Canal Authority to a Committee headed by the Vice-President of the Republic. Representatives of the Committee, formed at the beginning of 1983, include the Vice-President or his designee, MIVI, MIPPE, the Ministerio de Hacienda and the Municipio de Panama, but the Committee will be expanded as necessary to meet its needs.

A general master plan for land use within this area was written by the old Canal Authority, "The General Plan for Land Uses in the Panama Canal Area and Hydrographic Watershed," ("Plan General de Usos del Suelo para el Area y La Cuenca Hidrografica del Canal de Panama"). This plan was adopted by the Government of Panama on September 27, 1979, under Decreto 232, and published by MIPPE in 1980. The premises and objectives of the plan are:

1. The Metropolitan Region will continue to play the central role in the development of the country -- both in terms of population and economics;

2. The reverting lands and installations will augment possibilities for growth within the region and will induce selective growth. It will be done in such a way as to not cause disequilibriums in the region or national policy;
3. The reversion of lands and installations will have a major positive effect on programming of improvements spatially within the Panama City and Colon areas, and in the way these areas function, the quality of life, the cost of growth and relationship between the location of work and living spaces.
4. The use of the land and its programming should be narrowly related to economic expectations, and the land should contribute to the integral development of the country and the progressive offering of new services in the areas.
5. The control and preservation of the watershed will establish the limits of urban growth in the Atlantic and Pacific sectors.
6. The plan should strive for a balance of its uses, including appreciation of the natural resources of the area and its capacity to generate income, and pay attention to the necessity both to diversify and centralize to strengthen the national economy.
7. Growth should be related to the country's geographical position, promoting an integrated plan for physical, social, economic and political development.

8. The plan will function as a generator of special policies in the following areas: reserve of land for public use; new ways for ownership of land; full utilization and modernization of the infrastructure and services.

The plan is a general land use plan which delineates areas for urbanization, rural development areas, areas that have to be preserved in their natural state because of the watershed uses, and areas which must be maintained under U.S. or Panamanian control for canal operation or defense purposes.

MIVI has responsibility for preparing the "planes normativos" on a detailed scale, for reverting lands within the Zone. Coordination of these plans with MIPPE is done informally during their preparation, and with the Committee once they are written; and formally through MIPPE vis-a-vis the budgeting process. As of this writing, there has been no process regularized for adoption of MIVI Plans for the Reverting Areas Committee.

The disposition of all lands within the Canal Zone has been given to the Ministerio de Hacienda, but prior approval must first be given by the Guardia Civil. This puts the Guardia in a position of some power.

MIVI has so far prepared the following plans which affect the Zone:

1. "Paraiso y Pedro Miguel, Plan Normativo (Preliminar)" - June, 1981

As all such plans, this includes a plan for land use, the road system, zoning, urban development standards, rights of way and construction areas for streets, location of community facilities, and specified housing projects, -- their location, density and type.

2. Vivienda Tambien es Soberania: Redelimitacion del Sitio de Defensa de Albrook, MIVI, Direccion General de Desarrollo Urban - Departamento de Planificacion Metropolitana, Panama, August 1981.

3. Plan Normativo para el Area de la Avenida de los Martires, MIVI, Sept. 1981.

4. Concepto Urbanistico y Normativo, Desarrollo Residencial La Verbena, MIVI, Nov. 1982.

5. Plan Normativo - Ciudad Arco Iris (Rainbow City), MIVI, 1981.

6. Marco Conceptual para un Proyecto de Vivienda en el Corregimiento de Ancon (V^{ia} Ricardo J. Alfaro), MIVI, April 1982.

None of the plans outline procedures for sale of vacant lands.

In preparation are plans for:

7. Altos de Curundu, and
8. Campo de Antena

From all this has come an immediate priority investment plan entitled, Program for the Use of Reverting Real Estate in The Ward of Ancon, Consolidated Report. Revised February 28, 1982, President of the Republic, (Programa Para la Utilizacion de Bienes Revertidos en el Corregimiento de Ancon, Informe Consolidado, Revisado Feb. 28, 1982, Presidencia de la Republica.)

This report is a list of projects for funding which have been accepted and approved by the National Government. Each project was headed by a coordinator on the Panama Canal Committee, and had a group of advisors consisting of people from the institutions which will be responsible for implementation.

This list is the result of more detailed study of proposals originally offered in the MIVI plans cited above. Thus, though lacking an overall investment priority plan, an effort is being made to coordinate old planning efforts with development within these areas.

A site plan showing the location of the study area or the projects described is not included in the report. In the listing of projected

costs for each project, which is divided into initial investments and costs for maintenance, no mention is made of possible recouping of costs through sale of the land. This is even true for the housing projects to be located in Altos de Curundu, Campo de Antenas, Paraiso and San Miguel. In fact, the report states "In none of the two cases (alternatives for development in Altos de Curundu) does the cost of the solution contemplate rent or acquisition of the land." If one uses the World Bank sponsored housing project in Colon as a model, one can assume that the land will not be sold. Tenants in this project will be paying a nominal fee for use of the land, on the order of a \$1.00 per year.

What is missing in planning for the reverted areas is a bridge between the very general MIPPE land use plan and the more specific MIVI area plans. The bridge may well be partially provided by if MIPPE carries out the studies recommended in the 1982 report entitled, "Terms of Reference: Prototypical Program for the Development of the Canal Area," ("Terminos de Referencia, Programa Prototipo para el Desarrollo del Area Canalera"). The report recommends putting planning for the area within an economic context, through initiation of a series of studies.

The Committee has voiced two major concerns as well: the need to deal with increasing migration from the countryside and the need to involve the public in the planning process, since Panamanians regard these lands as literally their own.

D. Issues and Recommendations

The importance of the decisions made by the Committee on the Reverting Lands cannot be overestimated. This body will be responsible for directing the disposition of former Canal Zone lands. Their decisions will impact the growth and urban development patterns of Colon and Panama City; the economic direction and activity of the country; and the potential supply of great sums of money into the treasury if the land is sold and not given away. Few cities in the world are so fortunate as to find themselves in the position of being able to expand their borders into vacant or almost vacant territory already provided with some infrastructure at no cost to themselves. Three main issues need to be addressed: (1) planning for the use and allocation of the land, and planning for the reverted areas within the context of metropolitan growth; (2) phasing of development of the area and land pricing; and (3) physical standards to be used in development and regulation of activities with the reverting areas.

1. Planning for Use in the Reverted Areas Within the Context of Existing Urban Development

Recommendation: In conjunction with and under the Reverting Areas Committee a subcommittee should be established, the Coordinating Committee for the Planning and Urban Development of the Metropolitan Area of Panama City. The purpose of this committee would be two-fold:

- a. To establish a set of general policies, detailed plans, a list of priorities for investment and development, and a yearly program of investment in the reverting areas;
- b. To establish a general concept plan for the Panama City Metropolitan Area, which would integrate existing and future development of the area both inside and outside the reverted lands, within an economic context.

The Committee might be composed of representatives from MIVI, MIPPE, IDAAN, IRHE, the municipalities and representatives from the private sector. A representation would have to be included from a citizen's group(s) to insure public participation in the process. The working committee, a technical subcommittee, should be much smaller and composed of: a macro-economist from MIPPE, a regional planner from MIPPE, an urban planner from MIVI, an infrastructure-cost specialist from MIVI, and an outside knowledgeable land economist. The group will need a working space; it could be in the Office of the President of the Republic, to avoid identification with any special existing agency and give the group the weight of power.

There are several advantages to this structure. It puts planning for the reverted areas into a context for planning for the Panama City area; it forms a de facto urban development body for the

region, which if successful, could carry out its functions after the need for planning for the reverted areas has passed; it allows the committee to work informally before becoming an official body. It solves the problem of having to form an independent urban development body for the region without giving it direction. Planning for the reverted areas gives the committee an important sub-context and focus. It forces economics to become part of the planning process, and may pave the way for other planning bodies in this respect. The Committee would bridge the current gap between the highly theoretical land use planning done by MIPPE and the detailed physical plans done by MIVI.

The Committee would limit its scope to Panama City and not include the Metropolitan Region usually defined as including Colon, and the Canal as well. The scale of this is limited so the focus can be on the most critical detailed plans and policies. Planning for the Colon area should be under the direction of a separate committee.

No law would have to be passed to form such a committee since the Vice President's Committee on the Reverted Areas has the power to do what is necessary to get the work done.

Technical assistance could be given in the development of an 1) Urban Development Assessment, and 2) a Concept Plan, as mentioned earlier in this report under the recommendations for MIVI.

Technical assistance should be given in the funding of a land economist with full knowledge of the Panamanian situation.

2. Phasing of Development of the Reverting Areas and Land Pricing

Recommendation: Land in the reverting areas should be brought onto the market as slowly as possible so as to create a demand for its use, and maintain the highest prices possible. The money from the proceeds can be put into the general treasury of the country to be used for investment in infrastructure, housing, social services, or whatever the priorities of the country are. A quick calculation will serve to illustrate the potential value of this land. In the Pacific sector, 7,404 hectares are available for urbanization. At the rate of \$80 - \$100 m², the current price of well-located and urbanized land, these lands represent a net value of \$5.9 to \$7.4 billion. In the Atlantic sector, 8,786 hectares of land are destined for urbanization and are currently unoccupied. Using the same theoretical price for land, this represents \$7.0 - \$8.7 billion. The two sectors combined top \$13.0 billion in potential revenues to Panama. The land if parcelled out slowly will, of course, be worth increasingly more due to inflation and increments of value gained by increasing locational advantage and improved services. This land cannot continue to be given away. A land pricing policy and determination of the rate and timing of land

sales should be established by the subcommittee as rapidly as possible.

3. Physical Standards and Regulation of Activities with the Reverted Areas

Recommendation; Physical standards should be scaled to suit the potential size of the sub-area, i.e., in-fill development of an existing pueblito should not be forced to use an excessively wide street, for example; while a major development contiguous to Panama should use the same standard as those applied in the city.

Enforcement of zoning regulations will be a difficult issue, especially when it must confront spontaneous settlements, barriadas de emergencia or barriadas brujas. MIVI and the government as whole have been wary of relocating squatters, but may have to take a harder line when it comes to the reverting areas. We would recommend that a special fund be set aside from the proceeds of the sale of the land within the area for resettling, and perhaps, even subsidizing squatters for a limited number of years, two - three at the maximum. Studies in the squatter settlements have shown that after this period, families have established themselves sufficiently in the economic community so as to afford payments for housing and services.