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BELIZE SHELTER SECTOR ASSESSMENT

Prepared by : Cooperative Housing  
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## ABBREVIATIONS

CDB	Caribbean Development Bank
CIDA	Canadian International Development Agency
DFC	Development Finance Corporation
DHP	Department of Housing and Planning
GOB	Government of Belize
MHHC	Ministry of Health, Housing and Cooperatives
SF	Square Foot
SSA	Shelter Sector Assessment
UNICEF	United Nations Children and Education Fund
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
Recondev	Reconstruction and Development Corporation
Note:	All currency is in U.S. Dollars unless otherwise specified
	<u>Rate of Exchange</u>
	1 US\$ = \$2 Belize

## I. Summary

### Conclusions on Problems and Constraints in the Housing Delivery System

- A country of 8,866 mi<sup>2</sup> on the eastern coast of Central America, Belize has a population of 145,000. That population, growing at roughly 2.1% per year, is 52% urban, 48% rural. There is a significant rate of emigration and an increase in the number of youth and aged who must be supported economically by the gainfully employed who stay behind. The density of 16 persons/mi<sup>2</sup> will not in the near future create severe pressure on urban growth.

- Similar to the nation and the economy as a whole, the shelter sector is still in an early stage of development. Belize's size, sparse population and relatively significant emigration combine to mitigate the pressures on its housing delivery system. The nation's shelter problems are still quite manageable.

- The GOB in conjunction with the World Bank and other international lenders has developed and financially programmed an ambitious three year development plan. This economic development plan is highly dependent on external grant and concessional financing, currently the source of 60% to 65% of public sector investment. Within the context of the Development Plan, housing does not enjoy a high priority. To undertake the modest level of effort projected, the Government plans to seek outside financing. While Belize's economy cannot presently support large scale foreign borrowing at commercial rates, it is envisioned that over the mid-term, it will be able to diminish somewhat its heavy reliance on grant-concessional monies.

- There is no comprehensive, articulated national housing policy, and the operational results of the defacto policy do not advocate a sufficient proportion of available financial resources to satisfy the needs of the lower income strata.

- The housing finance structure in Belize currently functions under the joint efforts of the Department of Housing, the Reconstruction Development Corporation and the Development Finance Corporation, and is presently without significant funding. This structure lacks a predictable source of long-term financing for housing, a problem which is aggravated by the fact that there is no secondary market to inject liquidity into these institutions as needed.

Furthermore, there are currently no savings programs aimed at mobilizing popular savings for housing finance.

On the regional finance level, the secondary mortgage facility originally introduced by the Caribbean Development Bank has not proven reliable and has essentially ceased to function for the Belize market. Furthermore, it remains to be seen whether the CDB or for that matter any small multinational, regionally-based development finance institution can develop sufficient

sensitivity to the needs of local housing finance institutions, the necessary capital reserves and the operational skills to move rapidly to fill such a local void. The housing finance market is small in Belize; nevertheless, the lack of a secondary mortgage facility prevents the conversion to liquidity and recycling of funds already in the housing finance system.

Three institutions in Belize provide housing and housing finance:

- (i) Development Finance Corporation (DFC): middle income housing;
- (ii) The Reconstruction and Development Corporation (Recondev): middle and low income housing; and
- (iii) Housing and Planning Department: constructs low cost housing for rent or hire purchase (i.e., public housing).

All three institutions are modestly staffed, and any efforts at increased specialization of function or increased levels of production would necessitate changes in quantity and type of staff.

- Under the Department of Housing, Recondev, and DFC, the housing projects carried out have enjoyed deep subsidies. Such subsidies serve to make the distribution of housing resources narrow in scope, thereby limiting the number of beneficiaries while simultaneously fostering unrealistic levels of expectations about housing consumption and standards. These problems have been further compounded by the fact that debt collection has been for the most part technically inefficient, permissive and until quite recently has displayed a lack of political will to enforce payment obligations.

As is presently the case in many parts of the world, current factor costs for new construction in Belize--especially finance capital--are forcing a conflict between high expectations concerning shelter standards and affordability. Many families cannot afford the unit they aspire to, and will not purchase the unit they can presently afford at current production costs. Effective demand is accordingly extremely difficult to determine at the present juncture in the market.

Housing need as a function of general population growth, new household formations, obsolescence of existing housing stock and population shifts within the country is put at between 700 and 800 units per year. Approximately 70 percent of this need is among lower income families.

- The acquisition of land for home building purposes is uncomplicated. Publicly held land in both urban and rural areas of Belize is available to individuals at relatively low costs and through simple administrative procedures. Acquisition costs for unreclaimed and undeveloped land in Belize City are relatively low. However, a significant additional cost must be incurred to clear and fill the land before it is useable for development. Because of Government's current marketing price structure for land which it has acquired, cleared, and serviced, a significant portion of actual development costs are ultimately born directly by Government in subsidies. This practice

reduces the effectiveness of limited Government resources available for housing and the number of families which can be served.

- Infrastructure is one of the priorities of the Economic Development Plan and is being upgraded nationwide in an adequate manner. For example, potable piped water is now or will soon become available to all but those living in the most rural areas. The Belize City Water and Sewerage project, scheduled for completion in 1986, will make available sewage treatment facilities to the whole of Belize City. The electricity service is undergoing a program of upgrading in parts of the country and is reasonably stable and dependable. Provision of electrical service to small rural villages will continue to be difficult because of transmission costs and low population densities. Although garbage collection services are provided in the District Towns, service is reportedly intermittent and unpredictable.

- The limited funding available for housing finance is reflected in the small scale of the home construction industry in Belize. Because most home construction is done on a custom basis, economies of scale are precluded in project design and management costs, land and material acquisition, and construction. Although the number of contracting companies and trades people is sufficient to meet the present housing demand, there is a shortage of trained personnel at the job foremen/construction supervisor level of activity. The largest percentage of contracting companies, perhaps 75%, are capable of managing construction in the range of 1-10 houses at any one time. Only at very low income levels and in the most rural areas, is there any tradition of self-help or incremental housing construction. As incomes rise and urbanization increases, the tendency is toward the use of private, local contractors and more durable construction materials.

The cost of housing construction in Belize is relatively high due to the fact that upwards of 90% of the materials used in construction are subject to import duties of 30%, on average. Because there is little stock piling of materials by either contractors or building suppliers and delays in importing materials, shortages in materials frequently occur. Although some materials are produced locally, contractors and consumers tend to prefer imported products for quality reasons.

### Recommendations

#### - Housing Finance

Consideration be given to channeling the surpluses from the newly established Social Security Scheme to the end of providing a predictable, guaranteed source of long term finance for housing. GOB study the potential resource flow for housing finance which might result from empowering the public sector shelter institutions to accept savings deposits from individuals.

Technical assistance and general facilitating support be considered for the embryo Belize National Building Society. The rationale for that is that this Society's pilot efforts enlist the aid of the private sector in resolving housing needs and by attempting to capture savings for housing purposes offers the additional opportunity to increase available financing for housing.

Of the total monies available for housing finance, increased allocation be directed to the financing of housing projects, reducing where possible, individual and scattered site lending, as well as minimizing infrastructure service costs through economies of scale.

At the operational level, it is important to stress certain principles of management and collections. Increased effort be directed to portfolio management and debt collection. Prior to instituting more efficient and effective collection systems, however, it is important to establish policy guidelines on such matters as the level of permissible delinquency.

The SSA Team concurs with GOB decision to further specialize the functions of the three public sector housing institutions--Department of Housing, Development Finance Corporation and Recondev. Combining of functions should be examined. The implementation of this, however, will require specific strengthening of these institutions' capacities to efficiently deliver shelter to various target groups. To the extent that these changes produce either new modes or volumes of operation, the institutions involved will require additional or different types of staff.

#### - Housing Need and Housing Demand

The formal shelter delivery system is currently producing only complete, standard housing units. Taking the current \$3,500 national median family income in the context of the costs of housing, one must conclude that none of these families can currently afford standard housing at true market cost. Given the high expectation levels of the urban population, effective demand for incremental housing solutions is a virtual unknown. It is recommended that market studies be mounted to determine preferences for types of housing, level of public services and utilities, affordability, self-help/mutual-aid potential, and specific assistance required in the socio-economic side of housing program development. From the design side, the preference study be directed to examine incremental housing designs and schemes and the use of indigenous materials in construction.

In the interim, increased allocation of available housing finance be directed towards the preservation and upgrading of the existing housing stock, much of which is in a serious state of disrepair and neglect. This is especially true of Belize City, the primary city in the country.

#### - Housing Policy

Within the constraints of available human resources, and development priorities, efforts be undertaken toward the development of a nationwide comprehensive land use plan and housing policy. Such a plan, while encompassing the entire country, would address District (regional) needs and priorities.

Growth of Belize City proper be discourage or effectively capped. Pressures for growth could be vented to the natural suburbs, such as Ladyville, where land development costs are considerably lower. As a corollary, steady development of Belmopan is to be fully supported.

With respect to building codes, standards, and regulations it is recommended that they be reviewed and analyzed with particular concern for fire codes, new housing construction, home improvement and repair, self-help, and incremental housing construction. Additionally, an analysis of construction permit and building inspection processes and procedures and their enforcement should be undertaken. Such an analysis would help to identify the roles and responsibilities of various Government, and perhaps private, housing agencies and organizations in the process. It would include an estimate of the types and amounts of technical and professional personnel required to manage and administer the monitoring process.

Given the 90% import coefficient for building materials, GOB study the feasibility, revenue cost and potential benefit of reducing or eliminating the customs and import duties levied on building materials brought into the country.

Given the attention of private, voluntary organizations to serving the poor, especially evident in Belize City, some effort be made to enlist their support and strengthen their capacity to participate in the support of self-help, mutual-aid efforts in housing the poor. The same effort might further involve the Social Development Department, since its focus is the social welfare of the poor. A particular emphasis of voluntary and Government agencies' work with the urban poor be on female household heads and especially on the provision of day care for their pre-school children.

## I. COUNTRY SITUATION

### A. GEOGRAPHY AND CLIMATE

Belize comprises 8,866 square miles of eastern Central America, facing the Caribbean Sea on the east, Mexico on the north and west, and Guatemala on the west and south. Its 175 mile length and narrow width --68 miles at its widest--include a 160 mile-long barrier reef, a flat, swampy coastal plain, a heavily forested and hilly to mountainous interior, and many inland rivers and streams. Characterized by a sub-tropical climate with tempering trade winds, Belize has a mean annual temperature of 79°F and humidity of 80% coastal and 75% inland. Average rainfall ranges from over 50 inches in the north to 180 inches in the south and most of that occurs between May and February. Hurricanes may occur between June and November, but more typically favor August and September.

The coastal reefs of Belize are breeding grounds for a wide variety of sea life. The northern area is a dry, low-lying area consisting of timerlands. The plains are fertile and suitable for a large number of vegetable crops as well as such tropical crops as rice, citrus fruits, coconuts, and bananas. Certain more hilly parts are well adapted to cattle raising.

One aspect of the climate which must be underscored with respect to the housing sector in Belize is the role of hurricanes, past and potential. In 1931, 1961 and 1978 hurricanes blasted Belize City, the major urban center which includes over one-quarter of the country's population, almost leveling it in successive waves of destruction. The battering winds and water of hurricanes 'Hattie' in 1961 left many people dead and many more homeless. Hattie's devastating effect precipitated the transfer of the capital city 50 miles inland from Belize City to a new planned town --Belmopan--located on reclaimed jungle. Some Belizeans purport that Hattie's massive destruction of houses in Belize City caused such crowding that in two decades the shortage in living space has not yet been reversed.

### B. MAJOR ASPECTS OF THE ECONOMY\*

The economy of Belize registered modest growth during 1980 and 1981. The rate of inflation was between 15% and 18% annually and real economic growth in Gross Domestic Product (GDP) terms was between 1 and 2 percent. Under the impact of this relatively high rate of inflation and a decline in the levels of both public and private investment the growth of the economy has slowed recently and eased back from the sustained growth of the 70's when GDP increased in real terms an average of 5.5 percent annually.

\*The Material for this section was taken largely from the following sources:  
- Economic Plan of Belize, Central Planning Unit, Government Printery, Belize, 1980-83.  
- Foreign Economic Trends, Belize. US Department of Commerce, Oct., 1981.  
- Economic Memorandum on Belize, World Bank Report 3417-BEL, May 5, 1981.

The economy continues to be heavily dependent on imports, to the extent that imports in 1980, valued at \$140.6 million, once again exceeded total GDP. This high level of import dependency makes Belize quite vulnerable to international levels of inflation. In addition, large increases in local wages and salaries increased approximately 25 percent to 30 percent during the 1979-81 period. Export receipts in 1980 rose sharply, primarily on the strength of significantly higher world sugar prices. Total exports from Belize attained a level of \$131 million in 1980, up 50 percent from the 1979 level.

Economic performance in 1980 was mixed. The economy is still largely agricultural and sugar accounts for close to 50 percent of export earnings. Despite record earnings in 1980, output is still 15 percent below the tonnage achieved in 1978 and is insufficient to meet the quota allocated by the International Sugar Agreement. Despite record earnings, the industry is confronted by a number of problems, principally low productivity and smut disease.

Citrus, the next largest industry, accounting for approximately 10% of export earnings, had a record performance in 1980, increasing production to the highest level in the last 25 years. Due to insufficient processing capacity however, export income did not parallel the production increase, but did register a rise to \$8.2 million in 1980.

Banana production dropped more than 5 percent and the value of exports remained fairly static at 3.5 million. The industry is currently the focus of a major Government effort directed by the Banana Control Board. This project to rehabilitate this once important export is being assisted by a grant from the Caribbean Development Bank.

The fishing and forestry industries have not realized their potential. Due essentially to limited equipment, fishing is for the most part confined to the shallow waters inside the barrier reef. Reported catch of all types of fish declined steadily from 1979 to 1980. The forestry industry suffers from poor infrastructure, inadequate investment and insufficient application of modern technology. The industry appears stagnant. Total domestic production in 1980 was less than 1 million cubic feet. Local production is inadequate to meet local demand and as a result timber is imported. A recent United Nations study estimated that approximately 49 million cubic feet of tropical hardwoods could be cut annually on a sustained basis.

Emigration of trained manpower remains a serious problem for Belize. Among the factors constraining economic development is the need for increased numbers of management and technical personnel. Because of limited economic opportunities at home and the attractive wage and salary structures of more affluent neighbors, a large segment of the skilled labor force emigrates, primarily to the United States. It is estimated that there are approximately

## BALANCE OF PAYMENTS AND PUBLIC SECTOR EXTERNAL FINANCING

BALANCE OF PAYMENTS

Balance of Payments and Trade (US\$ millions)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Exports (fob)	62.1	79.8	87.0	130.8
Re-exports	17.5	25.0	30.2	45.9
Imports (cif)	90.1	106.0	133.2	140.6
Balance of trade	-28.0	-26.2	-31.5	-9.8

SUMMARY OF EXTERNAL PUBLIC DEBT OPERATIONS (US\$ millions)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Outstanding at end of period	21.0	36.9	46.0	54.9
Debt Service Payments	2.1	2.2	3.1	2.5
Breakdown:				
Amortization	1.3	1.0	1.7	1.0
Interest	0.8	1.2	1.4	1.5
Average Interest Rate	5.8	5.7	3.8	3.3

FINANCING PUBLIC SECTOR INVESTMENT (Bz\$ millions)

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
<u>Net External Financing</u>	<u>5.6</u>	<u>15.7</u>	<u>25.2</u>	<u>35.6</u>	<u>32.7</u>	<u>34.3</u>
Grants	7.9	8.2	8.4	8.6	17.4	19.3
Loans	5.1	6.4	16.3	30.7	19.7	16.8
Amortization	-3.0	-2.0	-2.5	-2.0	-3.3	-1.9
Change in For. Assets.	-4.4	3.1	3.0	-1.7	-1.1	0.1

35,000 Belizeans employed in the United States, or a number equal to the present labor force in Belize. One positive effect of this large scale emigration is the substantial sum of remittances sent to the families remaining behind. GOB estimates the foreign exchange value of these remittances at \$8 million annually.

The financial position of the public sector deteriorated somewhat in 1980. The deficit in the consolidated operations of the public sector grew from \$4.2 million in 1979 to \$8.4 million in 1980. Government borrowing, largely through the sale of treasury bills in the domestic capital market, went from \$3 million in 1979 to \$11.5 million in 1980. Outstanding public debt from external sources increased from \$28.7 million in 1979 to \$55 million in 1980.

The public sector investment program fuelling the Development Plan envisions heavy reliance on external sources to finance capital expenditures. Actual plus projected investment levels 1980-83 are programmed at US \$132 million. Approximately \$93 million of this amount was, or is, programmed to be external grants and concessional loans. Greatly increased borrowing from the domestic market would further increase the present strain on the local banking system, already experiencing high interest rates which in part reflect the greatly increased presence of the Government in the market. Given the limitations implicit in the relatively small size of the economy, the already high external public debt and the large external capital requirements explicit in the 1980-83 Economic Plan, it would appear Belize must continue to rely heavily on capital grants and concessional loans for financing its development programs.

## C. POPULATION<sup>1</sup>

### (1) General Patterns and Trends

The estimated total population of Belize based on provisional 1980 census figures is 145,353, of which 52% lives in urban areas, 48% in rural. (See Annex 1). The male/female distribution nationwide is just over 50% male. Population density is low, averaging about 16 persons per square mile. Highest densities are in Belize District (31/ mi<sup>2</sup>) accounted for by the presence of Belize City and in Corozal (32/ mi<sup>2</sup>) due to largescale sugarcane production activities there. The lowest density is in the southern district of Toledo (7/mi<sup>2</sup>).

The average annual rate of population growth for the ten years between the 1970 and 1980 censuses is estimated at 2.1%. The 2.1% figure, which must be used with care, reflects births, deaths and immigration rates. This rate contrasts with 1960-1970 estimated annual average of 3.25% growth, reflecting an annual average decrease between the two decades of 1.15%. The difference probably due to new patterns of out-migration. While population growth has slowed considerably over the past decade due to immigration, the measure of this phenomenon is problematic for at least two reasons: (1) a count of apparently large numbers of Belizeans going to the U.S. was until recently not

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<sup>1</sup>The 1980 census data as of this writing is still being computer processed at Tulane University. The only figures now available include rural/urban, males/females, and household totals.

well kept and (2) there is no practical way to record the refugee flow from the Central American countries of El Salvador, Guatemala, Mexico and Nicaragua.

It is worth noting that these migrants had eluded the counters until quite recently, since growth estimates were being projected at an annual rate of 2.89%. At that rate the 1980 population should have been a full 20,000 larger than the census showed it to be, hypothetically placing a much heavier burden on the housing sector than has in fact turned out to be the case.

A steady rise in the natural population growth is due to the increase in birth rates, hovering around 40 births per 1,000 for the past several years, and a decline in death rates--4.6% per 1,000 in 1980. The result of this pattern is that 50% of Belize's population is under 15 years of age. Furthermore, it is the 15-50 age group that has tended to migrate thereby depriving Belize of important productive forces. The large proportion of youth in the population places increasing pressures on the already heavily taxed social services.

(2) Population Distribution, Urban Center Growth Rates, and Internal Migration

Belize consists of one true urban center, Belize City, and seven small towns, each of which serves a rural hinterland. The country is divided into six administrative districts, with a district town center designated for each (Belize City, Corozal Town, Orange Walk Town, Dangriga, Punta Gorda, and San Ignacio). These so-called towns combine attributes of both the village and service town and, excluding Belize City and the capital city Belmopan, average 6,000 persons a piece. Populations of 40,000 and 3,000 inhabit Belize City and Belmopan, respectively.

Table 1

Summary Profile of National Population - 1970-1980\*

<u>Area</u>	<u>1970</u>	<u>1980</u>	<u>Annual Growth</u>
Belize City	39,050	39,771	.0018%
District Towns	26,100	35,571	3.6%
Urban Total	65,150	75,342	1.6%
Rural Total	54,784	70,011	2.8%
Belize Total	119,934	145,353	2.1%

\*1980 figures are provisional

Over the five decade period 1921-1970, the average of growth for towns was 2.6% while for rural areas it was 2.1%. During this period Belize City itself was then growing at a rate of 2.7%. However, in the most recent decade (1970-1980), Belize City only experienced a net increase of 721 persons or .0018% per year. This condition is explained by the high emigration rate from Belize City. In the same 1970-1980 period; all the District towns with the single exception of Dangriga, which showed a net population loss, demonstrated growth rates averaging 3.6 percent per year.

The small population size relative to the area of Belize and the sparse distribution of rural settlements both act as constraints on her development. The delivery of both physical infrastructure (public services and facilities) and social services (institutional supports in education, health, etc.) are constrained by the high per capita cost of service in low density areas.

Internal migration is not significant in Belize. Local populations are quite fixed, however, and where there is a need for seasonal employment, for example in the agricultural sector, foreign nationals are recruited.

Migration to urban and town centers occurs, in somewhat limited numbers. What migration takes place in the direction of Belize City--and there is some on the part of young men and women looking for opportunities unavailable to them in their villages or towns--is offset by emigration from there to the U.S. and other countries.

### (3) Income Levels and Distribution

Income figures are difficult to derive for Belize, as evidenced by the fact that the National Census questionnaire of 1980 did not ask even one question about income. The reasons for not inquiring were two-fold: (1) fear of biasing other responses called for in the questionnaire and (2) the assumption based on prior experience in Belize that responses to a question or questions on income would prove unreliable. Nevertheless, it is important to make some judgements about income from the limited number of sources that do exist and to bring together those sources which provide reasonable assumptions.

While the 1980 census itself includes no income data, a nationwide household expenditure study was completed in August, 1981. Based on a sample of 1,727 households selected from Tax Valuation Department list, the survey examined total household expenditure, for all goods and services.

The survey results in their present form are averages of household expenditures on a district-by-district basis and do not disaggregate any other variables except rural/urban and Belize City. Unfortunately, at this time no calculations are available to show degree of correlation

between level of expenditure and range of variability, differences, between specific towns, presence of female-headed households, number of earners, or degree of crowding. Nevertheless, the data presented are useful and equally important for future reference, they have been placed on computer discs which will permit much more refined analyses.

Table 2

Annual Consumer Expenditure by Private Households (H/H)\*

<u>District/Division</u>	<u>Expenditure US Dollars</u>	<u>No. H/Hs</u>
Corozal	\$5,835	4,055
Orangewalk	4,505	4,000
Belize	4,526	10,660
Cayo	4,332	4,200
Stann Creek	3,137	2,940
Toledo	2,669	2,290
Rural	4,241	12,910
Urban	4,511	15,235
Belize City	4,794	8,440
National	4,387	28,145 ( $\bar{X}=5.2$ )

Government officials indicated the figures in Table 2 seemed high. At the same time, however, most officials hypothesized the figures reflect significant remittances to their relatives by Belizeans working in the U.S. Indications of at least \$8 million in remittances per year have been estimated, providing an approximate addition on average of \$350 a year per household. Another factor mentioned is the informal economy which operates in many developing countries. Accurate measurement of the informal sector is impossible. However, in judging the results of the expenditure survey, estimated incomes derived from the informal sector activities must be factored in.

Despite the seeming inflated character of the household expenditure averages, they do make sense in relative terms. Corozal has the highest average because of the steady cash income derived from sugarcane work. Conversely, Toledo has the lowest, since it is a rural, subsistence farming type of economy. The other districts--except Belize District where there is more commercial-industrial activity due to the presence of Belize City--exhibit a mixture of subsistence-cash income-plantation type economies. Rural and urban difference in household expenditures is small, perhaps underscoring the developing nature of the Belizean society.

The expenditure survey figures must be viewed in the context of other, official statistics. For example, an estimate of the Central Planning Unit for per capita income in 1980 is US \$970. That figure

\*Adapted from Fairclough, "The Belize Household Expenditure Survey, 1980".

translates to an average household income of US\$5,044, which lends additional support to the illustrative nature of the expenditure survey's national household expenditure of \$4,387.

Wage rates and salary scales (see Annex 2) provide a range of income potentials. Government, the employer of approximately 20% of all employed, has increased salaries approximately 25% over the last 36 months. Government-fixed minimum wage is \$.55/hour for domestics working in private homes and \$.63 for domestics in an institutional workplace. There are many families in the poorer sections of Belize City who purportedly earn the \$25/week generated by domestic work. Where that is the sole income, one can appreciate, even considering gifts of durable and dollars from relatives in the U.S., that such an income will not go very far in the urban economy.

Public Service minimum wage rates that workers such as carpenter, mechanics, drivers, dockyard laborers presently earn are in the range of \$.90-1.55 per hour. That kind of wage gives a \$43-74 weekly income. Central Government salary scales suggest that Government is attempting to be more competitive with the private, especially business sector.

For examples of salaries from the health and teaching professions, the following figures are provided: a nurse's aid begins at an annual salary of \$1,385, while a public health nurse with some seniority can make \$4,637. An uncertified primary school teacher starts at about \$1,000, a certified primary teacher at about \$2,000, a 'trained' primary teacher at \$2,400, and a secondary school lecturer at a somewhat healthier \$6,000 level. The peak of the teacher's scale is around \$6,800.

Under- and unemployment in Belize is not insignificant and is quite pronounced for urban areas, as can be seen from the household expenditure study. The following table summarizes percentages of earners per household.

Employment and Unemployment on a Household (H/H) Basis

<u>District</u>	<u>% Of Number of Earners per H/H</u>			
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3+</u>
Rural	11	59	16	14
Urban	29	32	23	16
Belize City	36	21	24	19
National	21	44	20	15

What these data show is that rural households generally have higher employment levels than urban, both in number of persons per household employed as well as those unemployed.

Unemployment of the head of household is an important measure deriving from the household expenditure survey. The highest levels of unemployment take place in Belize City. There, almost two-fifths of the household heads are unemployed, contrasting with a rural rate of 11% and 21% nationwide. That means urban expenditures are probably skewed by a number of relatively high level incomes and a number of very low incomes in Belize City.

Median Income - Given the lack of any recent systematic income distribution data for Belize and the probable skewing of the household expenditure figures towards both high and low ends of the curve, the determination of annual median family income is derivative and should be adjusted on the basis of subsequent income distribution data. The national average household expenditure figure of \$4,387 is used, in concert with the indicators of income discussed, to arrive at a median family income figure of \$3,500.

#### (4) Cultural Attributes

Belizeans regardless of their various origins and life conditions tend to share a single norm about what a house should be: it should be a large, structure which does not require changes during its life and in that sense is a complete and final product. This norm applies equally to the above and the below median income portion of the population, especially that portion located in Belize City. What that has translated into for the poor is generally inadequate housing. The type of housing they desire is unaffordable and thus for the most part unavailable. Furthermore, at present there seems to be no strong incentive to experiment with minimal (low-cost) housing solutions.

#### (5) The Urban Poor

Since little statistical information exists on Belize's urban poor, what is presented here is a qualitative picture of poverty in Belize City. This description has emerged for the most part from discussions with representatives of voluntary agencies and Government social workers. It is they who have greatest contact with Belize City's disadvantaged. Also, a study which focuses on the Belize City quarter of St. Martin de Porres has been used. While not representative of the poorest, St. Martin is the only urban quarter recently studied in any detail.

(a) Family Size - The poorer families in Belize City tend to be considerably larger than the national average of 5.2. An example from the St. Martin de Porres section shows an average of 7.4 persons per household. These are people reported to be seriously overcrowded, mainly

as a result of a buildup of the extended family. The crowding of the extended family into a single dwelling is in fact very common in Belize City. Since the large majority of dwellings in Belize have only three rooms, it is by definition the urban poor with their large families who experience the most crowding. Houses designed for seven persons, for example, were later sometimes found to have twice and sometimes three times that number. The part played by the urban extended family in crowding results not only from the sheer need for shelter by families of increasing size, but also from co-residence stemming from child care purposes.

It is important to note that while crowding in the poor sections of Belize City reaches serious proportions, the 1980 population figures suggest a high degree of out-migration, often to the U.S. This means there is a demographic 'thinning out' process at work, as evidenced by the slim net growth of Belize City in ten years of only 721 persons or .0018% per year. The household growth rate in that city took place at a rate of only 50 or .006% on average per year. Nevertheless, since there is not much new housing in Belize City nor much adding onto an existing structure-- in part because of a 56% level of rental there--crowding continues to be a problem.

It was the consensus of voluntary organization representatives that urban poor (defined as family income below \$2,400 per annum) household size in Belize City, on average, range between 6-9 persons. Household size, however, should not be confused with a single house structure, for there is considerable doubling, tripling, and even quadrupling of poor families under one roof. Houses are partitioned off by landlords so as to accommodate more families. As many as 27 children living in one house divided four ways have been observed, though that is an extreme.

(b) Composition, Work, and Incomes of Poor Families. Many of the poor families in Belize City are female-headed. The tradition of common law marriage is present to a significant degree in Belize, often resulting in a man siring more than one family. The family must then be cared for by the mother. In a study called "Underprivileged Families in Belize City," done in 1968, 46% of 248 households examined were based on common law unions and over 40% consisted of female-headed units. So as to positively effect that situation, a legislative bill has been pending for several years to 'legitimize' the children of common law unions, such that they would be eligible, for example, to inherit property.

The nuclear family, where it exists, has a difficult time getting a start in Belize City because affordable housing is not available. Thus, the extended family unit becomes a predominant structure of the urban poor's life conditions. The widespread existence of the extended family in Belize City (as well as among the rural Mayan Indians in the south), eases the influx on relatives from rural areas. While the rural-urban migration pattern is not presently disruptive, it has its greatest effect

on the extended and, in most cases, already crowded family. It is mostly among poorer Creole and Garifuna residents of Belize City that the extended family prevails.

The poorest of the poor, most of which are female-headed households, have an income of between \$15-30 per week or \$60-120 per month. On those amounts some are able to get by in concert with the remittances from relatives in the U.S. or help from a common law husband not living at home. Those who do not receive remittances are often forced to seek welfare assistance.

While occupations of the poorest female-headed households vary, the most common is that of a domestic. Minimum wage for a domestic was set by law on December 19, 1981 at \$.55 per hour in a private home and \$.63 per hour in an institution. Other work, equally low paying, includes taking in washing, caring for another woman's children sewing, baking, salesclerk, food catering, market vending, hairdressing, among others. Poorer men, where present, work on the waterfront, as lottery vendors, street vendors, market vendors, and at any number of different odd jobs.

Some examples of urban poor like conditions presented below show that crowding, low wages, and lack of services characterize a segment of Belize City's population. While a profile of poverty can be presented, it is not possible to place a numerical value on its extent.

(i) Examples of Poverty in Belize City:

A 20 year old woman with two children receives clothing from the Belize Christian Council. She is unmarried and has moved away from her parent's house into a rental. Her income is \$25 a week for domestic work. \$15 of that goes to a woman who watches her two children (\$15/wk). Rent is \$9 a month. That leaves her \$15.50 a month with which to pay for food and the electrical bill. It is purported that the children's father could support them, but he also supports another family. The family must use the social welfare department for assistance.

A 26 year old mother of three, who is described as being "thin as a rake," is unable to afford her rent, so she begs for lodging. She does not know where the father of her children is, does not receive money from relatives in the U.S., and has been referred by the Christian Council to the Government welfare department because she is in need of food.

An extended family composed of a 75 year old male, his 72 year old wife and 45 year old daughter with her's and her sister's children total 17 persons. The children range in age from 6 months-21 years. They live in a house of four rooms, 10'x15' each, made of scrap lumber. At the time of the observations (1968, Price) there was no water storage facility and a bucket for sanitary purposes. The household head is a fruit vendor making about \$25 a week. Fortunately they own their own house.

While the above examples only begin to depict the socio-economic conditions of the urban poor in Belize, they at least give a flavor of that condition. It is important to emphasize that abject poverty is not the norm in Belize City and, furthermore, that the apparent shortage of housing in that city is not, as already described, strictly a matter of economics but involves perceptions and attitudes, as well, about what is minimally acceptable housing.

(c) Employment Opportunities - The exodus of many 15-50 year olds to the U.S. is produced by a combination of the lack of employment opportunity locally for significant numbers of Belize's trained cadre, and the attraction of higher wages. This pattern of outmigration is symptomatic of the inability of the Belize economy to produce the volume and quality of jobs commensurate with the numbers entering the labor force and the fairly high educational level of her people. While Government provides over 7,000 jobs, or 22% of total manpower positions, there are simply insufficient jobs in the public sector--especially at mid and high levels to absorb the qualified labor supply. Until the development process speeds up somewhat, the division of labor of the Belize economy will only serve to generate limited numbers of new jobs. All other variables being equal in Belize and the countries attracting her manpower, this process of out-migration should continue.

(d) Housing Preferences and Expenditures - While no original research exists on housing preferences of the poor in Belize, some general observations emerge. A single family unit is the preference in Belize generally, though a common practice among the poor, especially in Belize City, is for families to double up in one house through subdividing it. The partitioning of a house is basically a function of rental demand of families unable to afford their own housing. By and large, however, the preference is for an unattached, single family dwelling.

Expenditures devoted to housing are available from the earlier-mentioned household survey. Unfortunately, the data in their present state do not break out along such lines as income or sex of household head. Included in the housing expenditure are rents, mortgage payments, property taxes, services such as water, electricity, fuel, and telephone. Nationally, \$378 per year is spent by the average Belizean household on housing, representing 9% of total expenses. In Belize City, \$532 is spent each year, that being the highest average expenditure in the country and representing 12% of a typical household's budget. On a district basis, the rural area of Toledo shows the lowest expenditure on housing, that being \$106 and 4% of the district average.

These housing expense figures are all quite low for the reason that much of the housing stock in Belize is relatively old and already paid for. Rents continue to rise, but they apply mainly to Belize City, where 70% of the nation's rentals are located. But the global 12% figure for Belize City average expenditures on housing tends to hide the amount devoted to rent because the 44% owned households there are typically old structures and thus mostly paid for. It is clear from the above that the low average measure of expenditure on housing must be treated very carefully until that time when the raw percentages are refined.

D. GOVERNMENT\*

(1) The Economic Plan of Belize 1980-1983

The economic development plan logically builds on the agricultural sector in Belize as the strongest economic sector and the one offering the greatest short- and mid-term income potential. Agriculture is the largest export earner and employs approximately 40% of the labor force. Government objectives are for greater self-sufficiency in food production and an increase in foreign exchange earnings through increased export of agricultural products. A corollary to this main strategic thrust plans to increase, where possible, the value of agricultural products by processing them through as many stages as possible prior to their export. Thus focused, plans for the industrial sector stress the development of a wide range of small agro-industries of an import substitution character. The role of Government in this particular effort will be to facilitate this type of industrial development by providing concessions and the infrastructure required.

With an area of 8,866 square miles and a population of 145,000 inhabiting widely scattered production and population centers, Belize faces high per capita infrastructure and distribution costs. In recognition of the need to tie the country together more effectively and provide the infrastructure basis for development, fully 29 percent of the public sector investment program for the Plan period is identified as economic infrastructure. Construction of new roads as well as maintenance of existing roads is programmed and underway. This facet of investment will provide road access to new agricultural land as well as provide and keep serviceable the various feeder roads required for agriculture and other developments. In the area of water and sewerage, with the support of C.I.D.A., the first phase of the Belize City expansion and improvement of the potable water system and sewerage system has been completed and the second phase, to be completed in 1986, guaranteed.

Human resource development and social infrastructure form the third primary thrust identifiable in the Plan.

- Agriculture	29%
- Industry	3%
- Economic infrastructure	39%
- Social infrastructure	29%
total	<u>100%</u>

Of the 204 million total, external capital requirements total \$120.5 million or 59 percent. Of this amount, approximately \$89 million has been committed, \$13 million is in process and \$18 million is still to be secured.

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\* See Annex 6 for organizational structure of GOB

## (2) Urban Planning Functions

The agency charged with carrying out urban planning for the entire country is the Ministry of Housing, Department of Housing and Planning. There is no agency at the municipal level which is charged with either performing local planning studies and developing physical plans or implementing plans developed by the Department of Housing and Planning.

Currently there is no land use plan, master plan, or zoning plan for any urbanized or urbanizing area. However, there is a "land classification" system in use in Belize City. This system establishes certain size and cost parameters for lots and is discussed in the Land Analysis section. Because of this lack of an overall policy or physical framework, there is little formal direction or control of growth and services in developing areas. This fact makes it difficult, if not impossible, for Government to coordinate little formal direction or control of growth and services in developing areas. Efforts in the development of infrastructure: sewage, water, electricity, roads, etc. Activities in each of these sectors take place with little if any regard for efforts underway or plans in other sectors.

## (3) Government Legislation and Policies

(a) Housing. Currently there is no elaborated, articulated Government housing policy in Belize. This is true at both the national and local levels. Three Government agencies which are described in Section B.1 have been the major providers of housing in the public sector. They have provided housing by direct construction and by providing financing facilities. The Development Finance Corporation (DFC), a parastatal institution, has provided financing for 426 housing units since 1973. The Reconstruction and Development Corporation (Recondev), also a parastatal agency, has both providing financing and carried out construction projects for a total of 1,309 housing units since 1965. The Ministry of Health, Housing and Cooperatives (MHHC), Department of Housing and Planning (DHP), is the only governmental agency which has been involved in the provision of housing. The DHP has been active in only the construction aspects of housing. It has acted as the manager of aided self-help housing schemes and as general contractor for Government housing projects. The DHP has been responsible for the provision of 216 housing units since 1978.

The lack of a Government housing policy with a clearly defined set of objectives and the specific enabling legislation for it have made coordination of the collective efforts of these three agencies quite difficult and inconsistent from year to year. Because these agencies have not been functioning within a shared policy framework with guidelines establishing their institutional roles and responsibilities, there has tended to be an overlapping of efforts which have diminished the potential impact of the very limited resources available to the housing sector. This set circumstances and their effects have led, over the last several years, to a recognition on the part of Government that the housing delivery system may not have been completely responsive to the housing needs of some of the Belize citizenry. As is stated in "Notes to Consider in Drawing Up a Housing Policy for Belize", Government has shown a growing awareness of its need to assume a more active role in the provision of housing.

While the quantity of housing which has been produced by Government has been limited, Government has made this housing available through three different financing schemes in an attempt to make the housing affordable to a range of income levels. The most common type of plan is the hire/purchase program. Under this scheme, a purchase price is set and each month the prospective buyer makes a payment towards this amount. There is no down payment required. However, the buyer is encouraged to invest whatever he can. While no direct interest rate is charged, a Government subsidized rate of 6% is calculated into the monthly payment. The financing scheme used most often, after the hire/purchase program, is the direct purchase scheme. Again, no down payment is required; however, it is encouraged. Under this scheme, the purchaser is allowed to supply financing by any means available to him. Recondex has traditionally financed this type of purchase at an interest rate of 8%. As much of Recondex's capital has been provided through concessional and grant funding, the Government's subsidy in interest rates has been significantly less than if the capital had been acquired at commercial rates. In a thirty unit development currently under construction in Belmopan, Recondex has broken with this conventional 8% rate and is charging 15%, the actual cost of the money. (see B.1)

Of the 220 units built by the DHP through 1972, 128 or 58% were built as rental units. Since that time, the DHP has shifted its policy to building either hire/purchase units or direct purchase units. The monthly payments for these rental units are of course the least expensive to the lowest income families.

(b) Land and Urban Development. Belize is blessed with an abundance of rich fertile land. As reflected in the Economic Plan for 1980-1983, Government has placed a high priority on developing and expanding the agricultural base. This commitment to the agricultural sector is evidenced by the fact that most of the public sector investment planned for the 1980-1983 period will directly affect the agricultural sector. In order to accomplish these improvements, Government has instituted programs and legislation in land reform and land tenure. (See II.D.3.) To illustrate the dimensions of this agricultural potential, some statistics are worth noting. The entire area of Belize is approximately 7.5 million acres. This includes all of the offshore keys. Of this area, approximately 2.2 million acres are considered suitable for agricultural development. Fifty percent of this 2.2 million acres is best suited for arable farming and 50% is suited for grazing. It is estimated that only some 15% of the arable land is under cultivation now.

Ordinance No. 31 1973, enacted by the Belizean Government on December 31, 1973, was specifically designed to encourage land development and discourage land speculation, particularly by foreign nations and foreign-held companies. While this ordinance is specifically directed at foreign nationals, the general principles and procedures of land tenure are also those for Belizean citizens. A full description of this ordinance is found in Section II.D.3. However, Government's policy is to license

individuals the right to occupy and develop land - both urban and rural. The conditions for transferring that license to ownership are established when the license is granted, and if those conditions are not met in accordance with the timeframe established, Government reserves the right to revoke the license.

Although not stated as a policy as such, Government has traditionally subsidized the cost of land - both urban and rural - which is destined for housing. These subsidies have been quite substantial: for rural land approximately 50%; for urban land, from 45% to 79% in some cases. The magnitude of this type of subsidy obviously diminishes the impact that Government's limited resources can have on housing.

Although there are conscious governmental policies to 1) develop the agricultural base, 2) encourage investment in the development of land, and 3) reduce speculation in land, there are no governmental policies or guidelines regarding the actual or potential future land use in either rural or urbanizing areas. This lack of both global policies and specific procedures for land development, creates the opportunity for potential conflicts as land use activities non-compatible with existing or optimum uses are proposed for consideration.

With no established plan or set of priorities which government can follow to resolve these conflicts, the likelihood of land being used in a manner which is most productive and beneficial becomes open to question as these issues are highly subject to economic, political, and other forces of the moment. The potential for these conflicts is always greatest in and around urbanizing centers and increases as demands for infrastructure and services grow. Clearly, there is a need to begin comprehensive land use and physical planning efforts particularly in the District Towns.

(c) Building and Infrastructure Codes and Standards. The building codes and standards in use today in the construction sector in Belize are virtually a set of generally accepted and applied conventions, techniques and practices employed by builders. Although there is a formalized set of codes regulating building, construction in the housing sector at least is governed by the use of traditional building techniques and practices. The code most ardently adhered to and policed, both formally and informally, is one which sets a minimum of six feet clearance between buildings in Belize City.

The DHP is charged with reviewing and approving building plans before construction begins. Upon approval, a construction permit is issued. This approval step is essentially the only official governmental regulatory intervention in the building process. Periodic inspections or approvals are not regularly carried out during the construction process. Nor is there an occupancy permit required to authorize the use of a building after construction.

According to the 1970 census, no District Town had an adequate supply of water and sewage disposal systems. Between 1976 and 1978, the Public

Health Department installed "22 rudimentary water systems" in the districts of Belize, Corozal, Cayo, Orange Walk, and Stann Creek. These systems covered a total of approximately 15,000 people. In Belize City, the policy of the Sewer and Water Authority is to require that existing and new plumbing facilities be connected to the city-wide water born sewage system as it becomes available throughout the city. The Authority's policy is also to withhold connection of piped city water to homes until this sewer connection is made.

(4) Housing Expenditures by Government

Direct Housing expenditures by the GOB are relatively modest - \$300,000 in FY 1980-1981 which was less than 1% of the central government budget. The Ministry of Housing has a stock of rental housing amounting to some 300 units. Productions of hire-purchase units numbered 84 units in 1979, 92 in 1980, and 40 during 1981.<sup>1</sup>

The chief subsididy elements in public sector shelter activities are:

a. The Ministry of Housing uses an interest rate of 6%p.a. to calculate costs. The current market rate is about 15%. The implicit subsidy is 5.88 per month on 1,000 of cost, which is equivalent to 82% of the payment by the beneficiary.

b. The hire-pruchase units cost \$9,000 each. They are sold for about \$7,500 per unit - an additional 20% initial subsidy.

c. The Ministry of Housing is charging 30% less than the market value for the 300 units of GOB rental housing units.

d. Government land which is used for housing production, whether directly constructed by the GOB or by parastatal entities, is valued at about 60% of market value.

e. The GOB budget absorbs 90-100% of the capital costs of infrastructure.

f. The Water and Sewerage Authority runs an operating loss of \$25 million a year. A Canadian-financed team is looking into the rate structure and into the substantial water losses in the system. It is hoped that their study, and the Belize City water and sewerage project to be completed in 1986 will greatly reduce physical losses and lead to increased tariffs.

g. Electricity is generated mainly with diesel fuel. In order to narrow operating losses, since 1979 electricity charges are increased by 0.1% per KWH for every proportionate increase in the cost of imported diesel oil. The remaining operating losses are covered by the central government budget. A CDB-financed study is now underway to analyze the tariff structure with a view to reducing operating losses.

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<sup>1</sup>Under the hire-purchase scheme, the buyer does not receive title until the unit is paid for in full.

## II. SHELTER SECTOR DESCRIPTION AND ANALYSIS

### A. ANALYSIS OF CURRENT SITUATION IN HOUSING AND PROJECTION OF NEEDS

#### (1) Existing Housing Stock

There is a total of 26,013 dwelling units in Belize. In order to arrive at this figure, several different sources of information were used. Based on the 1980 census, the total number of households in Belize City was 8,437. This leaves a total number of households outside of Belize City as 19,700. From the observations of the team and discussions with Government officials and others, it is apparent that the only place where there is a significant number of dwelling units (DU) in which there are more than one household is in Belize City. In all other towns and rural areas, the predominant pattern is one household per DU. This would give a total of 19,700 DUs outside of Belize City. Using a study of buildings in Belize City done by the Valuation Department of the Ministry of Local Government and Social Security, dated August 31, 1980, there is a total of 6,313 DUs in Belize City.

(a) Densities. With a total land area of 8,866 square miles and a population of only 145,535, Belize has a population density of only 16.4 persons per square mile. The largest number and the highest density of people occur in Belize City. The official political boundary of Belize City encompasses the entire area of land falling within a two mile radius of the courthouse located in downtown Belize City. While this boundary does establish the official administrative limits, and is useful in that regard, the total surface area within these boundaries is not known with any degree of certainty. In addition, the boundaries include vast tracts of land which are as yet undeveloped and unpopulated. To establish a more useful basis for determining densities, the area of the built-up portion of Belize City was used. The boundaries of this area are determined by the sea on the north, east, and southeast; and on the west by a north-south line one mile due west of the courthouse. The area contained in these boundaries is approximately 1490 acres. Dividing the 6,313 DUs in the city, we would arrive at an average of 6.30 persons per DU. As these figures are only representative averages, one must expect to find a wide variation in densities from quarter to quarter in Belize City. On a national average, room occupancy rates are two persons per room per DU. The Situation of Children in Belize cites the following

example in the San Martin de Porres section of Belize City, there are houses designed for occupancy by seven persons. Some of these houses have 21 persons living in them.

(b) Age and Condition of Housing Stock. According to the 1970 Census, approximately 59% of the housing stock in Belize was built between 1960 and 1970. Thirty-six percent was built before 1956 and the age of 5% was not known. In Belize City, 63% of the houses were built before 1956. Many of the houses built before 1961 suffered damage caused by Hurricane Hattie and many buildings were structurally weakened. Although repairs and some maintenance may have been undertaken from time to time. When this information is coupled with the fact that, according to the 1970 Census, nationwide 79% of the buildings are made of wood and in Belize City 96% are made of wood, it is easy to understand the widespread deterioration of the housing stock in Belize City and, to a lesser extent, nationwide. Also, according to the nationwide census, 13% of the buildings were made of wattle and adobe and only 3% were made of concrete.

(c) Housing Quality. A housing survey undertaken and subsequently updated by the DHP in 1970 assessed the quality of housing in Belize City. The survey established two major categories which affect housing: dwelling factors and environmental factors. Under dwelling factors, the following items were assessed: infrastructure, internal crowding, design, and maintenance. Under environmental factors, the following items were assessed: land crowding, hazards, community facilities, and nuisances. Using these factors for a basis of evaluation, the five categories of housing quality shown below were established:

<u>Housing Quality</u>	<u>Percentage of Housing Stock</u>
1. Good	5
2. Acceptable	5
3. Questionable	20
4. Poor	60
5. Very Poor	10

From this table it can be seen that 90% of the housing stock as surveyed was of questionable or poorer quality. (see Annex 3)

## (2) Rural Housing

Rural housing in Belize varies little in construction or materials. Generally they are one story rectangular buildings. Most are built on grade and may have either a dirt or concrete floor. A good proportion are elevated on stilts, some only one to two feet, others seven to ten feet. Exterior walls maybe of either palm or dressed lumber construction.

The palmento palms are driven into the ground side by side to form the exterior walls and interior partitions. The "cabbage" palm is split and applied to a frame in clapboard fashion to form the exterior walls. Roofs are thatched palm leaves, or in some cases, corrugated galvanized metal sheets. Commonly, there are no piped water or bathroom facilities in the house. Water is available from a well or standpipe located nearby. Electricity is available in the District Towns and larger villages. Construction is usually carried out by family members - possibly with the assistance of extended family members and neighbors.

In the North, where economic conditions are favorable, there is more evidence of a gradual shift to the use of higher quality, more durable construction material. There is also the tendency to increase the size of the houses by increments as family income increases.

In the South, conditions of owner constructed housing are poor, and improvement possibilities are less than in the North, essentially because of existing economic conditions. The agricultural based industries in the South have made housing available for their workers. This housing is predominately single family detached units located together not far from existing processing plants. The housing is of wood construction, generally one or two rooms and is available on a rental basis. Housing furnished for single male workers is in the form of communal barracks. Water is available from standpipes located throughout the site, and communal toilet facilities are sometimes supplied. Electric service may be available at some sites, but is not routinely supplied to the units.

### (3) Infrastructure Services

(a) Water. The traditional system of water supply in Belize City is by roof catchment and storage in large timber or concrete cisterns. This system worked well in the absence of a city wide water system. As the traditional water system began to be supplemented and eventually replaced by the municipal piped water system, the storage tanks began to fall into disrepair. Furthermore, since the municipal water service has not always held up well, the water supply for a large portion of the City's population became a daily problem.

The existing water supply system which covers the entire city, either by stand pipes from the street to private yards or by direct connection to houses, is now being upgraded through the Belize City Water and Sewerage Project. This two phase project is being undertaken in cooperation with CIDA and the two and one-half year first phase is essentially completed. The purpose of the water supply portion of this project is to upgrade and extend existing water service. Two major functions are to increase water pressure and to replace broken and leaking water pipes throughout the city. In recent years, the Water and Sewerage Authority has been operating with a shortfall in revenue of approximately \$500,000 or 50% of its annual operating budget. Funds to make up this deficit have been supplied directly from the Government. It is planned that by 1986, the completion date of the project, the management systems and physical plant of the supply system will be sufficiently upgraded to operate on a positive cash

flow basis. A study several months long will be undertaken this year in cooperation with CIDA to establish water rates for the system.

In Belmopan, the metered water supply system connected to individual homes can accommodate a population exceeding 30,000. There is no provision for a roof catchment or water storage system in the houses.

Following the Government's policy to make potable water "available to all at all times of the year", all District Towns have been served with piped water supply systems. Some of the larger villages, for example San Ignacio, Benque, Viejo del Carmen, Burrell Boom, and others are also served by a piped water system. The water service is supplied to standpipes in public access areas, standpipes in private yards, or directly to houses. In small villages, service is supplied by drilled wells and hand pumps.

Government's efforts to supply potable water throughout the country have met and are continuing to meet with reasonable success. However, as demands on water resources increase, especially in the agricultural sector, and begin to compete for existing water supplies, conflicts in priorities for allocation and/or shortages of supply may result. A comprehensive assessment of supply and future demand should be conducted. Within this framework, decisions relating to type, size, and location of development can be made.

(b) Sewerage. In addition to the piped sewage systems, there are currently four methods of sewerage disposal being employed in Belize City. Those in higher income groups employ a septic tank with leach field. Because of the high water table, and in some cases clay soil, it is not possible to excavate sufficiently to allow the septic tank to be placed completely below grade. Consequently, the leach field is placed only slightly below grade. Most families in the city rely on the use of a pit latrine or a covered pail. Either of these two is generally located outside the main house in a convenient part of the accompanying yard. The pails are emptied each night into the canals which run through the city. There are communal toilets in numerous locations throughout the city. They are usually built directly over the canals or the sea, and empty directly into them. Because the elevation of the entire city is only inches above the sea and because the city is quite flat, the drainage is extremely poor. These conditions, especially during periods of heavy rainfall or high tides, render each of these systems ineffective. In addition, they create unhealthy conditions and public health hazards.

The Belize City Water and Sewerage project is being undertaken in an effort to alleviate these conditions. During phase one, which is essentially now completed, a sewage treatment plant was brought into operation. The city was divided into 15 zones roughly equal in population and geographic size and two of these 15 zones are now serviced by the sewage collection system and connected to the treatment plant. Funding for the second phase, which continues through 1986, has been approved and preliminary work has begun. As the collection system is extended through the city, residential and commercial properties will be required to connect to the sewerage system either before or at the same time as connection is made to the city piped water system. This will not only

help to alleviate the present unsanitary health conditions in the city, but will also insure that the sewage treatment plant will operate at designed loads.

Belmopan's modern water borne sewage disposal system runs throughout the city and can handle a population of some 30,000. For both Belize City and Belmopan there is a connection fee of \$20.00 and a token charge for sewerage and waste water of \$.50 per bathroom per month.

In rural towns and villages, the most commonly used system is that of pit latrines or "night pails". In that sector of the population which can afford the expense, a large portion of which is in the District Towns and villages in the North, homeowners are installing septic tanks with leach fields. The 1970 census listed the following statistics regarding nationwide sewage disposal systems:

Pit Latrines	47%
WC to Sewers	1%
WC not to Sewers	13%
Other Systems	35%
None	6%

As described in the Belize Economic Plan for 1980/1983, Government's efforts are to focus on the completion of the Belize City Water and Sewerage project and to provide potable water to rural areas. For the foreseeable future, the question of sewage disposal will likely remain within the purview of the individual household. Given the present population, its rate of increase, and the very low density of population, this policy seems viable at least for the immediate future. However, if any of these conditions were to change or if heavy development were to occur in a concentrated area, the question of sewage disposal would of course demand study.

(c) Electricity. The Belize Electricity Board is charged with supplying electrical power to domestic, commercial, and industrial consumers throughout the country. All electricity is derived from diesel powered generators. Fuel for these generators is imported as are all oil products in Belize. The standard service is 110 and/or 220 volts single phase two or three wire service and 220 volts three phase at sixty cycles per second. Belize City, Belmopan and all District Towns are supplied with electrical service. Most of the larger villages are also electrified. Much of this work was carried out under the rural electrification program established by the last Belize Economic Plan. Until recently, electrical service in the country, and especially in Belize City, had been subject to frequent disruption and power cuts. However, as a result of efforts begun in 1979 to reorganize the Belize Electricity Board and improvements in management and equipment electrical service has been greatly improved, and has become reasonably dependable and consistent.

At present, electrical generating capacity is sufficient in the areas where it exists, especially as relates to housing. However, there are still large rural areas of the country which are without electrical power. Government is investigating the potential for hydro-electric development. Based on investigative efforts undertaken to this point, it appears that small and micro hydro-electric generating plants offer potential for

rural electrification. These possibilities should be thoroughly investigated in order to encourage people to remain in rural areas and stem the flow of migration to the urbanizing areas.

(d) Garbage Collection. Garbage collection is provided in Belize, Belmopan, and all District Towns. In Belize City, garbage collection is scheduled twice per week for the entire city. Reportedly, however, collection occurs on a much less frequent basis and only in certain areas of the city. Collection is by municipal trucks and small hand-pushed carts. The refuse is taken to a site located not far from the edge of the built-up area of the city along the road to Belmopan. From time to time, there are efforts made to cover the refuse with land fill. However, this occurs on a relatively infrequent basis. In Belmopan, the collection process is essentially the same, except that there is less need to use push carts, as building densities are lower and vehicular access is easier. The collected refuse is taken to a single site some distance from the city center located along the side of the road to Dangriga. Again, some covering and fill occur, but only infrequently.

Although neither Belize City nor any of the other District Towns is experiencing rapid growth in either population or area, continued use of dumping sites such as these often continues with minimal attention given to the use and operation of the site. The site in Belize City is located only a few hundred yards from a residential area. This close proximity warrants investigation into operational procedures, unauthorized access, vermin infestation, and other factors related to public health and sanitation.

#### (4) Environment

Currently in Belize there are no policies, standards, or mechanisms which specifically address environmental issues. In addition, it was not possible to identify any pending legislation or preliminary discussions taking place in Government regarding environmental issues.

The environmental issue most noticeable upon entering Belize City is the presence of raw sewage in the open street gutters and canals which run throughout the city. Although this problem will be reduced as the sewage collection and disposal system now being installed expands to cover the entire city, the problem will continue to exist, although to a lessening degree, for a number of years. The situation presents a public health hazard on a day to day basis and becomes most severe in times of heavy rains and high tides.

Although not immediately apparent to a visitor to Belize City, a danger which exists at all times is the risk of a major conflagration. A very high proportion of the building stock in Belize City, 96% according to the 1970 census, is of wooden construction. The building density in the downtown portion of Belize City is the highest of any place in the country. Clearance between buildings is a minimum six feet, just barely enough to provide access should a fire occur. These circumstances will continue to present a risk to the public health and safety for the foreseeable future. Strategies to mitigate this danger should be investigated.

As discussed in the section on infrastructure services, there are

several public health and safety concerns related to garbage collection procedures and dumping site practices in Belize City and other District Towns which bear investigation.

As agricultural production increases and the demand on water resources grows, issues relating to water usage may become a major environmental concern. Future industrial developments may also place demands on water resources and raise the possibility of introducing chemical and toxic pollutants into the natural water cycle. Presently, there are no indications of significant levels of toxic pollutants.

The environmental factor which embodies the greatest potential of environmental risk is Belize City's location surrounded on three sides by water only inches above sea level in a hurricane prone area. These conditions and the devastation caused by Hurricane Hattie in 1961, were the driving forces which led to the movement of Government offices 50 miles inland to Belmopan. As approximately 1/3 of the population of Belize still lives in Belize City, and is at severe risk in the event of a hurricane, emergency procedures for sheltering and/or evacuating the population should be reviewed and updated.

(5) Community Services

Together, Government and the private sector in Belize provide a broad scope of services, including educational, welfare, health, and nutrition, among others. The provision of schools by the public and private sectors is quite adequate and, generally, Belize citizens have attained a fairly high educational level. The 1970 Census showed that 72% of the population had or was presently receiving a school education. Of that percentage, 89% have been or are presently being trained at the primary level, 11% at the secondary level. As of late 1971 the following number of schools were operating:

Table 3  
Number of Schools in Belize

Pre-school	23
Elementary	220 (I-III Standards)
Secondary	24
Church-State	17
Government	5
Private	2
Advanced	6
Special	2 (for Retarded & Disabled)
Total	<u>273</u>

The schools train almost exclusively for an academic orientation, making few provisions for technical/vocational skills. Because the supply of such academic skills is greater than the demand, there has been an exodus from the county of persons with these skills.

Health care facilities are distributed quite evenly throughout the country, though there is a need for more physicians and trained health personnel in the country. One problem in this respect is the relatively low salaries paid to qualified nurses, a factor which limits their numbers.

Presently there are seven hospitals, one in each of the district centers, except Belize City which has two. There are 28 health centers and one training center for nurses.

A point which should not be overlooked concerns the presence of day-care centers. Although there are 23 pre-schools, according to several representatives of private, voluntary organizations, these do not serve the segment of the population most in need: poor, female-headed households. In situations where the mother must work to support her family, there is, say these same representatives, an insufficiency of facilities to provide child care services. The result is that the mother must (a) pay a private individual a large portion of her pay to care for her pre-school children, or (b) where possible, leave the children with a relative or friend who is willing to take the children without charge, or (c) leave the children to fend for themselves, an occurrence which is not uncommon in poorer parts of Belize City. Where day care services do exist there is usually a fee, which most working mothers find very difficult to afford.

Thus, any shelter program aimed at the poor, especially in Belize City, should direct attention to the employment needs and consequently child care requirements of "single" working mothers.

(6) Housing Need Projections by Income Group

Although a forecast of housing need is always difficult to make because of the variability of the many factors involved, in the case of Belize it is made even more difficult because of the lack of precise data on out migration and net new household formations. The interaction of these two components, in the context of the presence of the extended family cultural pattern in Belize City and the southern part of the country, made determinations of housing need and potential effective demand still more difficult. It is difficult to determine to what extent the existence of the extended family decreases the real need for additional housing stock, or the extent to which it merely testifies to the lack of supply coming on stream.

The value of even estimated housing needs lies in the perspective they contribute to the demands which will be placed on the shelter delivery system. The projections of housing need presented in the table below are based on the following assumptions:

a. Replacement of housing inventory losses at 2% of existing stock (or 2% of 25,000 = 500)

b. New household formations based on an average yearly population growth between 1970 and 1980 of 2,542 would yield 489 households per year given a 5.2 household average. The figure of 489 is reduced by a range of from one-third to one-half in order to reflect conservatively the rate of emigration and the role of the extended family in absorbing new families. Thus, that figure would more correctly lie somewhere between 153-245 new houses per year.

c. Migration factor of .005 which produces a current need of approximately 140 units.

d. The general paucity of family income data and income distribution force an assumed bracketing of total population into: "upper" = 10%; "middle" = 20%; "moderate" = 35%; and "lower" = 35%. The median would fall about halfway into the "moderate" grouping, which included all households with an income estimated provisionally at approximately \$3,500 per year.

ANNUAL HOUSING NEED BY INCOME GROUP

<u>Income Group</u>	<u>% of Population</u>	<u>Unit Need Housing Year</u>
upper	10	80
middle	20	161
moderate	35	281
lower	35	<u>281</u>
	total	803

While the peaks and troughs of formal sector housing production make it difficult to fix the apparent annual shortfall of such production relative to an annual supply requirement of 800 units for the total society, it would appear that at a minimum an annual average backlog of 500 units is being accumulated.

(7) Demand as a Function of Family Income

Using the national, median family annual income figure of \$3,500 and assuming a) 25 per cent of monthly family income is available for P&I, b) a loan term of 20 years, and c) a market interest rate to the beneficiary of 18 percent annually, we see that families at the median, as a maximum, would qualify for a loan of approximately \$4,720. Considering that the lowest priced standard home produced by the Ministry of Housing, with substantial subsidies is currently priced at costs, current models of standard housing are simply not affordable by income groups below the median.

Effective demand is even more difficult to gauge within the current market since there is no experience to speak of regarding market acceptance of incremental housing solutions produced for sale.

Given the current cost of construction versus family income equation, it would appear that consumer preference samplings followed by the design and market testing of variations of less than complete standard shelter units should commence in order to develop more specific information concerning the rural and urban lower income housing markets.

B. INSTITUTIONAL ANALYSIS

(1) Government and Para-Statal

(a) Department of Housing and Town Planning, Ministry of Health, Housing and Cooperatives. As described in the 1980/81 budget, the functions embraced by this Department are as follows:

- Administration of the Housing and Planning Ordinance, Chapter 88
- Planning and designing of housing schemes
- Conducting surveys to determine housing needs and establishing priorities
- Constructing and maintaining Government housing schemes
- Collecting of rental installments from allottees in housing schemes
- Administering slum clearance schemes, including construction of low cost houses

The staffing pattern of the Department, for purposes of this analysis, has been grouped under the three major headings of Management, Administration and Production. The table of organization provides staff as follows:

	<u>Number of Positions</u>
<u>- Management</u>	
Chief of Department	1
sub total	<u>1</u>
<u>- Administration</u>	
Rent collector	1
Secretary typist	1
Messenger	1
Driver-mechanic	1

The administrative operations have been temporarily strengthened by utilizing the two open vote (temporary staff) positions available to secure the services of:

Assistant rent collector	1
Clerical assistant	1
sub total	<u>6</u>

- Production

The on-site production management and supervision functions resulting from direct force account construction, which is the mode utilized exclusively by the Ministry over the last several years in its building

production operations, are staffed by:

Building supervisor	1 (supervises construction)
Building foreman	2 (works with trades on site)
Draftsmen	2 (trained on the job)
sub total	<u>5</u>

With total staff of 12, the Department can be seen to be very modestly staffed. The fact that the chief of the Department is the only technically trained university level professional available, poses severe limitations on the scope and scale of operations which can reasonably be undertaken by this unit. Furthermore, this fact cannot but place tremendous demands on the person of the Department head as he apportions his time between management of the total range of responsibility of the Department and his de facto role as the head of its technical operations.

One major objective of the Ministry is the production of a small number of units for certain needy low income families. These are families whose very low and often precarious incomes prevent their qualifying and/or utilizing the other shelter finance institutions. The size and nature of the national economy and the investment priorities of the Economic Plan, produce relatively small sums of money for this purpose. Over the past three years budget allocations for housing construction by the Ministry have averaged \$225,000 per annum.

The Department of Housing and Town Planning typically produces a 480 square foot standard house. While there has been an ongoing program of experimentation with panels, and most recently with local materials such as palmetto palm, to reduce or hold down the rise in the cost of such units due to steady escalation of the various factor costs, there has been no retreat from the relatively high spatial and construction standards embodied in this unit.

The maintenance of what must be considered relatively high shelter standards when measured against target group income and current costs of the individual components of housing production and the financing of its sale, result in a combination of high subsidy cost to the GOB, restrictions on the number of families reached with the amount of resources available, and an increasing inability to reach very far down the income scale for beneficiaries.

The level of operations, as funded from the national budget over the past three years, is shown below:

	<u>Belize \$</u>	<u>Housing Production</u>
1978	350,000	84 (21 in districts outside of Belize)
1979	400,000	92 (24 in districts outside of Belize)
1980/81	600,000	40

Portfolio and Collections Operations

The current portfolio of the Department is:

- 298 hire purchase houses
- 301 houses on rent
- 60 apartment units in six tenement buildings

total: 659 units

A general analysis of the collection records pertaining to the portfolio was not possible as they were then undergoing an updating by the Rent Collector. However, discussions and examination of these available accounts revealed serious and long term arrears. The sum of arrears outstanding as of March 31, 1981 is equivalent to 7.6 months of total billing.

An analysis of the 123 individual accounts audited and available presents the following profile:

<u>up to date</u>	<u>1-3 months</u>	<u>4-6 months</u>	<u>more than 6 months</u>
16	33	21	53

These numbers show that only 13 percent of accounts are up to date and fully 43% are in arrears more than 6 months, some having arrears representing an excess of a year's payments.

The arrears problem is not only significant in the monetary dimension, but is perhaps most damaging when considered in the light of beneficiary perceptions of "real" financial obligations undertaken in connection with Government produced shelter. The failure to affect collections over a prolonged period of time may be perceived by beneficiaries as the ultimate subsidy; namely a belief that such housing is a gift, which need not be paid for. Such an image of public sector produced housing, if widely held, could critically blunt GOB cost recovery efforts, and greatly increase the cost to the government of its housing program by substantially eliminating reflows of funds already invested.

(b) Reconstruction and Development Corporation. The devastation brought by Hurricane "Hattie" which struck Belize on October 31, 1961 led to the creation in late 1962 of a special statutory agency, the Reconstruction and Development Corporation, which is an arm of the Ministry of Finance. Initially, the primary task of this Corporation was to administer relief funds received by Belize in the form of grants and loans from the United Kingdom.

Operations commenced in January of 1963, with the period identified with hurricane rehabilitation programs running through 30 June 1965. In

the course of these operations, a total of 7,000 applications for housing were received, clearly documenting that the rising demand for housing was outstripping the volume attributable to the hurricane. Accordingly, the Corporation continued its housing finance operations, generally serving a moderate to low income group.

The Board of Directors consists of 7 members, 6 of whom are Government. The Chairman of the Board is the Minister of Finance.

The central office of Recondev is located in Belmopan with a staff of 10, including the General Manager and the Deputy General Manager. There is a Recondev office located in Belize City responsible for all operations, except loan approvals outside of the capital city. The office has a staff of 6.

In addition to its standard individual housing finance operations, Recondev is responsible for city maintenance at Belmopan. Accordingly, there is a separate staff, of approximately 50 workers, representing a wide spectrum of skills such as masons, carpenters, electricians, plumbers, etc.

With but a few exceptions, when the corporation has engaged in the development and subsequent marketing of small housing projects, the normal operation of Recondev is to issue land to individuals, who in turn engage their own contractors to build, extend or repair houses on a custom basis. The general characteristics of the lending operation are:

- Maximum loan for a wooden structure is \$5,000
- Maximum loan for a concrete block structure is \$6,000
- Loans can cover up to 100% of the improvement
- Most frequent loan term is 16 years, but 20 years is possible
- Current interest rate is 15% annually

Precise data on the number of loans made in each of the last three years was not available. However, the total amount loaned for that period is shown below. For the first 10 months of 1979, 387 loans were issued. From 1972 to 1976 an annual average of 147 loans were issued.

	<u>Amount (in B \$)</u>
1978	625,721.56
1979	748,514.37
1980/81	850,147.41

The current portfolio shows a total of 1,309 loans outstanding, plus another 196 accounts representing housing projects developed by Recondev, of which 92 units are in Ladyville and another 104 in Belmopan. On the whole, there is good geographic balance to the pattern of Recondev financing; of the 1,309 accounts, 40 percent are in Belize City, with the balance distributed throughout the country.

Terms for both projects referred to above feature 6% annual interest to the beneficiaries for 20 years. In both instances the source of the funding was the Caribbean Development Bank, with a 20 year loan to

Recondev at 4%, guaranteed by the Government of Belize. In both projects there are cost subsidies to the beneficiaries. While the units were sold, via the hire purchase route, for \$5,000, actual costs per unit including land and on site infrastructure were approximately \$7,000.

Recondev is currently completing marketing operations for a 30 unit project in Belmopan with terms of \$9,000 per unit, 20 years at 15%. The market has not yet adjusted to the impact of increased capital costs and Recondev is experiencing some difficulty in disposing of the units. The current market phenomenon is an increasingly familiar one, namely, those people whose income can afford the monthly payments aspire to considerably more house, while those who like the unit cannot buy it at present market term. Of the first 248 applications received, fully 70% did not qualify from the standpoint of family income.

Collections. An examination of the status of collections reveals a significant delinquent problem. As of 31 December 1981, of the 1,309 standard operations accounts, only 261, or 20 percent were up to date. The remainder of the profile by accounts in arrears is:

<u>1-4 months</u>	<u>5-9 months</u>	<u>10-12 months</u>	<u>over 12 months</u>
239	188	71	550

Taking into account the arrears existing at the Ladyville and Belmopan projects, a total of approximately \$550,000 is delinquent. It should be noted that this amount exceeds the total amount available for lending in the 1980/81 year of operations.

The Recondev, on the basis of past and present volume of operations, is clearly the largest developer of housing and the largest source of housing finance among the three public sector entities identified. Furthermore, the Corporation, based on the tasks assigned to it, appears to be the Government's preferred mechanism for delivering shelter and/or shelter finance.

An analysis of the staffing pattern would indicate that strengthened capability in technical and financial programming and in the technical and inspection sections would be beneficial. In connection with stated GOB objectives of increasing specialization of function among the three public sector shelter institutions, it is worthy of note that should the emphasis of Recondev activities shift from the lending mode to the project developer mode, significant additions to staff would be required, involving both number of staff and professional discipline represented.

(c) Development Finance Corporation. The Development Finance Corporation is in effect the national industrial development bank of Belize. Nevertheless, its limited housing activities have made it, along with the Department of Housing and Town Planning of MHHC and the Reconstruction Development Corporation, one of three principal housing/housing finance institutions in the country.

The DFC was reactivated by the Government in 1973 with a small equity base of approximately \$200,000 and lines of credit up to \$600,000 from the Caribbean Development Bank for small industries and agricultural credits. The DFC experienced considerable success in the mobilization of external funds, showing total assets as of December 31, 1979 in excess of \$15 million.

In terms of lending activities, loan approvals have been distributed in relation to economic development priorities, with agriculture, not surprisingly, receiving the major share of funding inputs.

The distribution of loan approvals from 1973 to 1979 was as follows:

Agriculture	53.3%
Housing	18.1%
Manufacturing	11.7%
Tourism	8.6%

(The balance was made up by services, student loans and equity)

The second place standing of housing here is a reflection of standard housing's "big ticket" price characteristics rather than an index of either GOB or DFC priorities in development investments.

By source, the financial resources of DFC have their origin as shown below in the following percentage breakdown:

Caribbean Development Bank	65.6%
Canadian International Development Agency	12.2%
United Kingdom	6.6%
European Development Fund	3.9%
DFC	11.7%

The central office of DFC is located in the capital city of Belmopan, with additional offices functioning in each of the district capital cities. Total staff is 57, two of whom are responsible for housing operations.

In 1976, DFC was designated as the authorized Belize agent for CDB's Secondary Mortgage Housing Scheme. Between 1976 and 1978 the CDB committed \$2 million for the purchase of housing mortgages under this program. The CDB secondary mortgage operation would appear to have been a leading factor in the DFC role in housing finance. Subsequently, CDB funding for this secondary operation dried up. As a result, the DFC lending activity to the sector has also declined significantly. The number and value, in Belize dollars, of loans authorized for housing is shown below:

<u>year</u>	<u>units</u>	<u>B\$</u>
1973-78	206	4,212,848
1979	79	1,726,350
1980	123	3,216,942
1981	18	541,690
total	426	9,697,830

Lending for shelter by DFC goes to moderate and middle income families. Lending criteria are:

- minimum loan amount of US \$5,000
- maximum loan amount is \$20,000, with a maximum property value of \$30,000
- site must have water, electric power and vehicular accessibility
- no more than 33 1/2 percent of family income may be dedicated to loan repayment in evaluating eligibility
- annual interest rate is 12 percent
- maximum term for a wooden structure is 15 years
- maximum term for a concrete structure is 20 years.

### Portfolio and Collections

As of the close of business 12/31/81, DFC had generated a portfolio of 426 housing loans. Under the CDB secondary mortgage facility DFC has sold 283 of these mortgages to the CDB, retaining the servicing obligation for a 2% fee.

Collections are in the main affected by direct payroll discount by employers under the terms of an irrevocable deduction agreement. Payroll deductions are mailed or sent to the nearest DFC office or Barclays Bank. No payment is charged by Barclays for this service to DFC.

Of the 283 mortgages sold to CDB and served by DFC, 16 are delinquent, where delinquency is defined as arrears over 90 days. Of the 143 mortgages still held by DFC, 35 are delinquent. While the arrears in the housing portfolio are not nearly as extreme as those encountered in the Recondex and Ministry portfolios, they are nevertheless at levels universally rated as high, and every effort should be made to reduce them as quickly as possible.

Housing lending as a linkage with agricultural lending in rural areas should be seen as a natural complement to DFC activities and thus encouraged and supported. But, given the nature of DFC as an industrial development bank does raise questions of whether it can or should dedicate the time and manpower to develop the in-depth housing expertise required if it is to assume a leading role among public sector housing finance institutions.

(d) Sugar Labourers Welfare Fund. This fund derives from a tax on the tonnage of sugar exported annually. For the past three years, this has produced between \$80,000 to \$90,000 annually. Loans for home improvements/expansion or the construction of starter core housing are made exclusively to sugar workers. While principally used for individual loans, monies from the Fund have been used to finance the construction of small community centers in sugar worker towns and villages, and for the purchase of a mobile health unit.

Lending terms are as follows:

- must be a sugar industry worker
- maximum loan is US \$600
- sixty percent of the amount is a grant, 40 percent a soft loan
- interest charged is 6 percent per annum
- term is up to 5 years

The Fund is administered by a GOB appointed Board, with the administrative assistance of a mini staff.

The total size of the Fund's annual operation is modest, representing an approximate annual loan volume of 130. However, featuring as it does the combination of grant and concessional terms, the operations must produce regional distortions and delay adjustment of effective demand to wider capital market rates for housing finance. It is perhaps even more unfortunate in that this ongoing distortion exists in the relatively dynamic, affluent sugar producing zone where one would normally anticipate that buoyant incomes would produce speedier adjustments to, and acceptance of, essentially commercial money market equivalents in the housing finance market.

(2) Private Sector Institutions

From an institutional point of view, the private sector housing and housing finance configuration can best be characterized as unorganized and generally underdeveloped, with a few exceptions:

(a) Credit Unions. The Credit Union movement in Belize is large, widespread and a significant factor in the provision of credit. As of 12/31/80, there were 23 active credit unions operating in the country, representing 27,000 members, or 18 percent of the total population. Twenty-two of the credit unions are members of the Belize Credit Union League Ltd., which is the trade association of the movement. The largest Credit Union in the country, Holy Redeemer, though instrumental in organizing the League is not a member. The credit unions hold combined assets of approximately \$7 million.

Of this total number of credit union members of the League, nine are located in Belize City, with the balance spread throughout the remaining districts. Mesopotamia and St. John's in Belize City, La Immaculada in Orange Walk District, and Mount Carmel in Cayo District each have over 1,000 members. Holy Redeemer Credit Union is the largest and most powerful single credit union in the nation, having approximately 15,000 members and assets of over \$5 million.

Although essentially a vehicle for consumer credit, the movement does finance home improvements and expansion, and estimates that between 10 percent and 16 percent of all lending is for this purpose.

Current regulations governing credit union operations significantly constrain the scope of possible increased activities in home improvement lending and housing finance by placing a ceiling of 6 percent interest payable on savings, and 12 percent interest chargeable annually for lending. The Credit Union League, in the face of current commercial capital market rates of 11 percent for savings, 15 percent for time deposits and 18 percent to 21 percent for annual interest on loans, has requested permission of the Government to raise interest ceilings on loans to 18 percent annually and the ceiling on savings rates to 12 percent.

The credit union network is at the point in its management and administrative development where an increasing number of individual credit unions are in transition from a part time volunteer management of administration to a full time, more sophisticated more technical one. Thus, meaningful judgements on management and administrative capability should be on an individual credit union basis.

Nevertheless, the movement's overall growth and success in meeting consumer credit needs is clear testimony to its effective performance in meeting a need. Given their extensive network nationwide, their experience with consumer credit, and the apparent need and demand for home improvement lending, the Credit Union network would seem a natural vehicle for the delivery of this type of specialized housing finance.

(b) Commercial Banks. There are four commercial banks operating in Belize: Barclay's Bank, The Royal Bank of Canada, The Bank of Nova Scotia and the Atlantic Bank. While the commercial banks provide approximately 75 percent of credit to the private sector, (DFC 12.5, credit unions 11.1) they traditionally have not engaged in mortgage lending or long term housing finance.

Their lending activities are for commercial purposes and personal loans against collateral. Literally a handful of loans may result with the commercial banks working in tandem with local insurance company operations to provide a very lucky few policy holders with mortgage loans; but this has always been the exception, and in the current capital market, a negligible intervention. Some financing of expensive housing for upper income families comes from the commercial banks. However, since even in these instances it does not show up as lending or mortgage financing for housing, but rather takes the form of short term, personal loans against collateral, its volume cannot be established.

There are no mortgage banks in Belize.

(c) Insurance Companies. A very few mortgage loans have traditionally been provided by life insurance companies for policy holders but the number has always been so small as to constitute a negligible factor in the total housing finance picture. In the current money market, this small trickle has dried up.

(d) Belize National Building Society. A group of concerned citizens drawn from the business and professional community has organized and incorporated the Belize National Building Society to conduct a savings and home loan type thrift operation. The effort is still in its early stages, with active sale of participations currently underway. Not only would this represent private sector participation in housing finance but, more importantly, would represent the first attempt at mobilizing domestic savings exclusively for the purpose of housing finance. None of the public sector institutions currently active in housing supply or housing finance accept savings.

### (3) Belizean Capital Market

In international capital markets, especially in the United States, interest rates have risen steeply over the past two years. A similar pattern has occurred with interest rates in Belize. "During the first six months of 1981, the weighted average interest rate on commercial bank loans climbed from 16.5 percent to 19.1 percent."<sup>1</sup>

<sup>1</sup>The section draws heavily for its statistical content on the Quarterly Review, Monetary Authority of Belize, June, 1981, p.2.

The composition of savings also changed in reaction to the more favorable rates available for time deposits. Commercial banks are currently paying 15% annual for time deposits, 11% for savings, and 5.25 percent for demand deposits. In the face of these adjustments, demand deposits decreased. In the second quarter of 1980, deposits rose \$1.6 million or almost 4 percent. The bulk of the increase in total deposits was concentrated on time deposits which rose by \$750,000. Following that trend, in the twelve months since June of 1980, time deposits rose by almost \$8 million, or 47 percent.

The rate of growth on deposits was exceeded by the growth in loans over the same period. Banks increased their lending almost 26 percent. The increase in loans and advances was largely confined to the private sector which increased its borrowing from \$35 million to \$45 million. However, the growth in the banks lending to the public sector is largely due to the increased holding of Government securities. Bank holdings of Treasury Bills were raised from \$1.5 million to \$4 million.

Rising very strongly in the course of 1981 was the foreign indebtedness of the commercial banks. Compared with an increase of \$2.6 million in their foreign assets, the banks increased their foreign liabilities by some \$6.7 million. This rise represents a threefold increase in their foreign indebtedness.

Financing for the Poor. Housing for the poor is financed basically from personal income and remittances from relatives in the U.S. There is very little use by this income group of banks or credit associations, since they have very little savings capacity or other collateral for borrowing purposes. Low income, female-headed households have even more limited means than the poor generally to save or borrow for financing their shelter. That is one of the reasons for the high number of rentals among women-centered families in Belize City. Many are simply unable to afford the down payment required even were financing available to them.

Remittances help in paying an individual's rent or repairing of a house, but would probably not be decisive in building a fund for use in making a down payment or in otherwise qualifying a poor person for a loan were that available.

The role of remittances has already been discussed. The informal, sporadic nature of the process make it impossible to quantify the extent to which this source of funds is utilized by recipients for housing related ends. However, given the apparent concentration of recipients in the Belize City area, and to a lesser extent the urban centers in general, one can conclude that income surveys of urban families to establish potential housing demand most probably understate urban family incomes.

#### (4) Community Organizations

Community-level organizations contributing towards either the promotion or financing of housing in Belize are few in number. In the southern part of the country there is a cultural complex called the "fagina" by which the inhabitants help each other on a neighborhood-kinship basis in times

of need. This can include the construction of shelter. Its distribution is limited, however, along geographic and cultural lines and would probably not serve as the foundation for mutual aid or cooperative activities. In the towns and Belize City there is little formal or informal community-level activity in the provision of housing. Likewise in the northern rural areas, where individual initiative more than any other factor is the primary force involved in the process by which a person obtains a house or does not.

On the question of mutual aid, self-help efforts in housing, public and private officials alike indicate that these have not met with much success. A recent example is a mutual aid project under the Ministry of Housing in the western town of St. Ignacio. There, the residents were provided with pre-cast concrete panels, 30 per house, and some technical help in erecting their abodes. The group effort failed, in part, it was explained, because of a lack of will of the residents. Another example from several years ago was an aided self-help project, which USAID supported through the introduction of two community workers. The communal effort itself was successful to the extent that a fairly large number of concrete blocks was produced. It ultimately failed, however, for reasons of poor planning the funds necessary for land purchases were not and never became available to the home builders. They were left with many blocks and no place to live. Yet another experiment in self-help from the 1950's took place in Cincerella Town, Belize City. Here, the Government provided reclaimed land and concrete block-making was done by the participants. The record on who actually constructed the houses, of which there were only a modest 12, is unclear.

In the limited number of case studies of self-help housing available, it becomes clear that one key ingredient has been missing. That is the factor of training the participants in self-help or mutual-aid operations, the how-to level of activity, and the responsibilities and rewards of each participant. Clearly, in any future self-help or cooperative housing effort, the element of training must be introduced as an integral part.

## C. CONSTRUCTION SECTOR ANALYSIS

### (1) Formal - Private

The demand for housing in Belize is generated virtually exclusively on a custom, one-unit-at-a-time-basis. For reasons which are discussed later, there is little, if any, speculative housing built. A process commonly followed to build a house would generally follow the steps outlined below. A family either has or acquires a lot on which to build a house. The actual plans for the building may be developed in several ways. Usually the prospective owner has some general ideas about the layout for the house. Based on a sketch of these plans, he may get estimates from one or more builders for the construction of the house. Often two estimates are requested from a contractor: one to supply both labor and materials, the other to supply only labor with the owner supplying materials. Depending on the size of the project, the contractor's current workload, and other factors, the cost estimate will include a profit margin of between 10% and 25% of the contractor's input (materials and/or

labor). In more rural areas and on less complicated houses, the owner will often act as the general contractor. In other cases, the contractor will handle arrangements with the various building trades.

The actual acquisition of building materials by the owner may be carried out over a long period of time, especially if the owner has storage space available. If substantial quantities of materials must be acquired in a short time period, they are purchased from local building suppliers. Most small contractors do not stockpile materials. This is because they generally lack sufficient storage facilities and their cash flow is insufficient. Upon attaining approval of the housing plans, construction begins. Contractors are given a small advance upon beginning construction and are paid periodically during the construction based on completion of certain agreed upon phases. Upon completion of the house, to the satisfaction of the owner, payment of the final installment is made to the contractor. Reportedly, contractors do not experience difficulty in receiving payment.

As previously mentioned, speculative building is virtually non-existent. The primary reason for this is due to a lack of availability of long-term mortgage financing. Even though short term construction financing is available, albeit at high interest rates, contractors will not expose themselves to the risk of having to make high monthly loan payments for an extended period of time.

As regards new construction in the private sector, even for lower cost houses, prospective home owners contract for construction of complete houses. There is little tradition, especially in towns of incremental housing solutions. In rural areas, the pattern is for construction of complete houses even though they may be small and relatively simple. Construction is a mix of selfhelp and purchased skilled inputs.

## (2) Formal - Public

The DHP has been one of the main providers of housing in the public sector. Since 1978, it has produced a total of 216 houses. One hundred and seventy-one, or 79% of these have been in Belize City. These are concrete block or panel buildings 480 SF in size. They have concrete floors and corrugated galvanized metal roofs. Each has two bedrooms, a bathroom with basin, shower stall, and toilet supplied, and one large living space with a kitchen at one end. Kitchen cabinets and plumbing are supplied as is a limited number of electrical outlets and lights. Septic tanks are also provided. In some cases, DHP has contracted for construction services. On other projects, DHP has acted as the general contractor. Experience has shown that when DHP builds the units directly, its construction costs are approximately 39% below contractor estimates. Because of reduced lead times for project planning, design, and construction, DHP has often acquired building materials on the local market. This fact has required that the import duties and taxes be paid, adding approximately 30% to materials costs. According to DHP figures, current construction cost in Belize City are as follows:

<u>MATERIAL</u>	<u>BUILDING TYPE</u>	<u>COST</u>
Concrete Block	Bungalow (on grade)	\$28/SF
	Stilts	\$32.5/SF
Wood	Stilts	\$21/SF

(3) Informal

The largest portion of informal building occurs in the rural areas. Building materials and techniques used are largely traditional as discussed in A.2. (Rural Housing). In Belize City, construction in the informal sector is virtually confined to the very limited number of squatters. The few squatter units which are visible are constructed primarily from wood. In most cases, this is dimensional lumber which has been painted and reportedly scavanged from burnt or abandoned buildings in town. Most are between 100 and 200 SF and have either a wooden or corrugated metal roof. Some are built at grade; however, most are elevated on stilts one to two feet above ground level. Virtually all these units are built by their owners with little input from the formal sector.

(4) Building Materials

Belize suffers from a major constraint in the sense that essentially all types of building materials are imported. This fact creates two major problems - increased costs and irregular supply. Not only is the cost of transportation added to the basic price of the commodity in its country of origin, but as illustrated in Annex , import duties and taxes add on an average of approximately 30%. The level and percentage of total housing construction costs represented by materials varies greatly depending on whether the unit is elevated or at grade, the size of the unit, the quality level of material used, plumbing and electrical fixtures, labor component, etc. According to DHP, the materials component of the 480 SF unit they are currently producing as the general contractor is 70 percent. The composition of these materials is 50% imported, 50% local. Contractors estimate that, before including profit margins, the material component in construction will vary between 1/2 and 2/3 the total cost of construction. For low income construction, the figure would probably be near 60%.

Many of the building materials are imported from England, Europe and the United States. Because Belize is a small market and because its port facilities are limited, the supplies from Europe are often transshipped in the United States. According to some reports, they may wait there upwards of six weeks before being forwarded to Belize. This not only causes delays in the arrival of items which are ordered for specific jobs, but also causes shortages in the items normally stocked. Both of these events makes the efficient management of construction projects extremely difficult. The major materials manufactured in Belize are structural and ornamental concrete block, doors, windows, plywood, dimensional

lumber, nails, and corrugated roofing material. Only the doors, plywood, and lumber, are made exclusive of imported components. Other locally available building materials are sand and concrete aggregate. There are problems reported for all of these materials except for the corrugated roofing sheets. The building block is very unstable dimensionally. The plywood, even that graded as marine, delaminates. The lumber is badly dried and not dimensionally stable. River sand can only be acquired during the drier seasons of the year when the river levels are low. Beach sand is acceptable because of high alkaline content. Supplies of aggregate are often badly graded and shortages are frequent. Doors and windows both must be special ordered and shortages and delays are common. For these reasons, contractors and consumers tend to prefer imported products, even given the additional cost and time involved.

Except for concrete, doors, windows, lumber, and concrete block, which must be ordered directly from manufacturers or specialized suppliers, most other building materials are available from local building supply merchants located in Belize City. Generally the suppliers offer a 10% to 15% discount for purchases in quantity. Only two suppliers stock market size quantities of concrete. This is supplied in 96 pound sacks.

Two types of palms are the other major examples of indigenous materials which are used in building construction. The palmento palm which grows to a height over thirty feet has straight stalks with diameters of 2 to 2-1/2 inches. These stalks when driven into the ground in rows are used as load-bearing and interior partition walls. The DHP has also experimented with using bark peeled from these palms as reinforcement in structural concrete wall panels. The "cabbage" palm which grows to heights of 40 to 50 feet with a 14 inch diameter, is also used in traditional construction. The trunk of this palm is split length-wise to form "boards" of 3/4 inch to 1-1/2 inch thickness. These boards are used as horizontal siding sometimes in clapboard style. The botan palm is often used for pilings along the seacoast. This palm has a stalk of about six inches in diameter and is less abundant than the palmento palm. The leaves of several different types of palms are used in making thatch for roofing.

As previously mentioned, there are several existing local building materials manufacturers or suppliers. However, there are constant quality and supply problems with these materials which result in management difficulties during construction and a contractor and consumer preference for imported materials. There are three major areas which bear investigation regarding new or renewing local building materials industries. First is a concrete batch/ready-mix plant which functions periodically and is reportedly fraught with management and financial difficulties. Availability of this type of service would be of great benefit to contractors, as presently virtually all concrete work is mixed by hand or with a small mechanical mixer on site. Secondly, in recent years, there have been investigations into and proposals for the establishment of a clay-based building products plant. According to technical studies done by the UNIDO, good quality clay materials exist in various locations in the country. Continued investigation into the possibility of establishing this type of plant

is certainly warranted. Presently, the building of roof trusses on site is a time-consuming and therefore unduely expensive proposition. If precut and/or preassembled roof trusses were available on order, there would be significant costs savings - especially on repetitive designs or projects. However, it remains to be seen if the market and investment required would warrant the establishment of such a facility.

(5) Contractors and Labor

As there is no official association of building contractors, from which data on the industry is available, the information presented in this section was gathered from discussions with a number of building contractors and Government officials. It represents a consensus of opinion and estimates regarding the construction industry. It is estimated that there are between 25 and, at an extreme, 40 firms or individuals that could be considered contractors functioning throughout the country at any one time. Perhaps 1/4 to 1/3 of this larger number could be considered highly marginal and active only on an intermittent basis. Any of these firms could manage the construction of one house. It is etimated that a construction project of up to 10 houses could be managed by any of 12 - 18 firms. Only about 8 to 10 firms could manage a construction project in the range of 100 to 125 housing units.

The largest percentage of these firms have between 5 and 12 permanent employees, with the average being about 10. Each of these employees would be skilled in one or more specific trade - carpentry, masonry, etc. One or perhaps two might be able to act to a limited degree in the capacity of a foreman or construction supervisor. Depending upon the demands of the work, day laborers and/or subcontractors are hired to perform specific jobs. The larger of these companies take on work located throughout the country. The company owner travels between jobs, having the most broadly skilled employee act as job foreman at the site least visited by the owner. A constraint expressed by several contractors is a lack of sufficient numbers of people qualified to act as job foremen/construction supervisors. As contractors' employees gain the skills and confidence sufficient to take on supervisory rolls, the tendency is for them to become independant and form their own separate company. Even at the present moderate level of construction activity in the country, contractors find it difficult to locate and retain sufficient members of supervisory personel. In contrast to this fact, it is generally felt that there are sufficient numbers of workers in each of the specific building trades. The only trade in which a shortage may develop if there were a significant increase in the building activity would be carpentry. While the number of workers in the various trades may be sufficient, from the contractors' perspective, the level of skill possessed by the average worker is lower than desirable.

There are no construction trade unions in the country. The official Government wage scale is shown below.

<u>TRADE</u>	<u>RATES</u>
Carpenter, Electrician, Plumber	
Class I	\$1.30/hour
Class II	\$1.15/hour
Class III	\$1.00/hour
Laborer/Worker	\$ .95/hour
<u>TASK</u>	
Steel Finish Concrete Floor	\$1.40/sq. yd.
Plaster or Finish a Wall	\$1.25/sq. yd.
Lay a Structural Block	\$ .20/per block

Generally speaking, in rural areas, labor costs are approximately 10% less than in Belize City. Workers are to be paid per diem if they work away from their home town.

#### D. LAND ANALYSIS

##### (1) Availability

Belize is a small country (only 8,866 square miles), and its relatively small population accounts for a density countrywide of only 16.4 persons per square mile. Even in the most heavily populated parts of Belize City the density is only 2.67 people per acre. Given the facts, the enormous potential for agricultural development, and Governments' policy to develop this potential, The Government through the Ministry of Agriculture is pursuing the process of recovering and redistributing agricultural lands to Belize citizens. In the 1980-1983 Economic Plan, it is estimated that the Ministry's average annual acquisition rate is 100,000 acres at an estimated cost of some \$1.25 million.

In urban areas, especially Belize City, Government has reclaimed and offers for sale areas of land. This land is classified in Zones A,B,C as shown on the following page. Following the procedures outlined below, a person wishing to acquire title to a lot need only apply at the Ministry of Lands. He is then issued a leasehold for a specified period of time, commonly five years. At the end of the period, if the petitioner has met the conditions specified in the lease (e.g. construction of a house of a certain size, the investment of a certain amount, etc.) and pays the agreed upon purchase price, he is issued free and clear title to the land.

##### (2) Values

The low population densities in Belize have caused prices for undeveloped land to become extremely inflated. In and around Belize City, acquisition prices for undeveloped, unserviced lots are deceptively

low. Large tracts of Government-held land which would be suitable for residential development, are available for a little as \$1,750 per acre or \$175 per 1/10 acre lot. In addition to this price however, the cost of clearing and filling the land must be added. Currently it costs approximately \$150.00 per acre to clear land. Average land fill costs are difficult to establish since the factors that determine the overall cost, such as availability of land fill, location of the land fill, transportation distance, and depth of fill required are highly variable. However, based on conversations with several contractors and Government officials, it may cost in the neighborhood of \$1,700 to fill an urban lot.

Land which has been cleared and reclaimed by the Government is offered for sale and is classified in the following manner.

<u>ZONE</u>	<u>LOT SIZE</u>	<u>COSTS</u>
A	1/4 acre	\$2,000
B	1/8 acre	\$ 900
C	1/10 acre	\$ 400

Based on current market sale values obtained from the Valuation Department, Ministry of Local Government and Social Security, the following comparison is made:

<u>ITEM</u>	<u>ZONE A LOT</u>	<u>ZONE B LOT</u>	<u>ZONE C LOT</u>
Market Price	\$9,680	\$3,630	\$2,420
Government Price	\$2,000	\$2,000	\$ 900
Effective Subsidy	79%	45%	63%

Although it is not stated Government policy, prices for Government owned land tend to be lower than current market value for comparable land. This is, in effect, a subsidy which is passed on to the eventual land purchaser. In cases where Government has purchased land and then installed infrastructure, the same sort of effective subsidy has also occurred. For example, in Ladyville near the industrial park which was developed by Government, some 125 housing units were built. Based on land acquisition, infrastructure costs, and sale price of the lots, there was an effective subsidy on each lot of approximately \$200.00 or 57% of the actual development costs.

Obviously this type of subsidy acts to diminish the effectiveness of the limited resources available for housing, ultimately reducing the number of families served.

### (3) Ownership

Presently there are two systems under which an individual may claim right to land: common law and title deed. Since 1978, the Minister of Lands has set aside certain areas in the country as "designated areas". Within 90 days of the "designation" persons claiming ownership of land within the designated area must apply to the Ministry to receive title deed to that property. Any land within the designated area which is not

filed for within the 90 day period comes under the purview of the government. After a land survey is completed to determine the specific boundaries of a particular parcel of land, a First Title Certificate is issued. Title for the land is recorded by the Registry of Lands. For the lands outside of designated areas, the Minister of Lands may issue title by ministerial fiat.

Any person wishing to acquire publicly held lands may apply to the Ministry of Lands. At that time, the boundaries of the specific piece of land, a purchase price, certain conditions for development, and a time frame for meeting those conditions are determined and a leasehold interest is issued. During the leasehold period, any payment made is credited toward the purchase price. If the conditions which are stipulated in the leasehold are met, and the agreed upon purchase price is paid, a freehold interest in the property is issued. One stipulation in the leasehold agreements is that Government reserves the right to increase the sale price every five years.

These procedures, part of Government's overall land policy to direct capital towards development of land rather than purchase of land, have been effective in reducing land speculation and inflation of land prices. Ordinance No. 31 issued in 1973, was designed to discourage land speculation by foreigners and foreign-controlled companies. This law requires that a foreigner must obtain a license from the Minister of Lands in order to purchase land in excess of one-half acre within a city or town or in excess of 10 acres outside a city or town. The license stipulates terms and conditions which must be met during the term of the license. Breach of any term or condition in the license shall render the license voidable by the Minister of Lands.

Government-stated land policies and the implementation of those policies have acted to make land accessible at reasonable costs to those willing to invest in the development of the land.

## Bibliography

- Astell, A.S., Unido Official, Improvement of Sawmill Industry of Belize, May, 1978.
- Bassili, Antoini V., Unido Official, Development of the Secondary Wood Processing Industries, Belize, August 1976.
- Belize Tourist. "Belize Facilities Map", Belize City, 1981.
- Belize Social Security Board. "Direct Payment Contribution Card" (Exemption), Belmopan, 1982.
- Belmopan Belize, C.A., description booklet, published by Eyre & Spottiswoode Ltd, Kent, England.
- British Honduras Ordinance No. 17 establishing Reconstruction and Development Corporation Ordinance, 1962.
- Development Finance Corporation, "Annual Report & Statement of Accounts", Belize, December 1979.
- Evensen, Sverre. "An Inventory of Nutrition Education Activities in Belize," Tulane: Tulane University, Department of Nutrition, School of Public Health and Tropical Medicine, December 11, 1981.
- Fairclough, E.H. "The Belize Household Expenditure Survey, 1980. "United Kingdom Technical Cooperation Office and Government of Belize Central Planning Unit. Belmopan, August 1981.
- Fodor. "Belize: The Undiscovered Beauty," in Fodor's Guide to Central America, 1980.
- Forestry Development - Belize; Project Findings & Recommendations - Unido, 1978.
- Government of Belize. A Study of the Situation of the Children in Belize. Ministry of Social Services, Labour, and Local Government, Central Planning Unit, in collaboration with UNICEF, International Year of the Child Committee, November, 1979.
- Government of Belize. Abstract of Statistics, 1978-79. Central Planning Unit.
- Government of Belize. Economic Plan of Belize, 1980-83. Central Planning Unit, Belmopan, April, 1980.
- Government of Belize. "Notes to Consider in Drawing Up a Housing Policy for Belize," n.d.
- Government of Belize. Abstract of Statistics, 1980. Statistical Office, Central Planning Unit, Belmopan, December, 1981.

- Government of Belize. Ministry of Labour, Social Services and Community Development. "Wage Rates from Public Service Employees - Government and Quasi-Government Sector" (Unofficial). Belmopan, February, 1982.
- Government of Belize. Ministry of Labour, Social Services and Community Development. "ILO Questionnaire Form," Wages Per Hour and Normal Hours of Work Per Week for Selected Positions, Belmopan, 1982.
- Government of Belize. "Second Provisional 1980 Population Figures," Based on 1980 Census, Central Planning Unit, Belmopan, 1982.
- Government of Belize. "Urban Development Survey: St. Martin de Porres, Belize City," Statistical Office, Central Planning Unit, Belmopan, February, 1982.
- Government of Belize. "The New Belize." Government Information Service, Vol. XI, No. 12, December, 1981.
- Kirkendale, George A., Unido Consultant, A Critical Evaluation of a Structural Clay Industry in Belize, January 1978.
- Kooyman, Fred & Janice Allegue, Draft Report on Housing, 1978.
- Latin American Report. A New Look at Belize (British Honduras). New Orleans, International Trade Mart, n.d.
- Lewis, E. An Approach to Housing in Belize City & Belmopan. 1975.
- Monetary Authority of Belize. "Quarterly Review", Vol 5, no.2, Belize, 1981.
- Monetary Authority of Belize. "Statistical Digest", Belize, May 1976.
- Price, Roland E. "Family Life in Rural Belize (Belize District)." British Honduras, Christian Social Council, Belize City, 1968.
- Price, Roland E. "Underprivileged Families in Belize City, British Honduras." Christian Social Council, 1968.
- "Quarterly Economic Review of the West Indies, Belize, Bahamas, Bermuda, Guyana, Annual Supplement 1981", Spencer House, London.
- Schrewe, H., Unido Official, Proposal for Improvement of Sawmill Industry of Belize, November, 1977.
- United States Agency for International Development, "Low-Cost Housing in British Honduras," in Cooperative Housing and Minimum Shelter Approach in Latin America, Vol. 2, n.d.
- United States Department of Congress, Foreign Economic Trends & Their Implications for the U.S.: Belize. Washington, October, 1981.
- United States Department of State. "Belize Post Report." Department of State Publication 9168, February, 1981.

United States Department of State. "Background Notes: Belize." Bureau of Public Affairs, September, 1980.

World Bank. Current Economic Position and Prospects in Belize, 1979.

BELIZE PROVISIONAL POPULATION FIGURES BY DISTRICT, SEX, AND HOUSEHOLD\*  
1970-1980

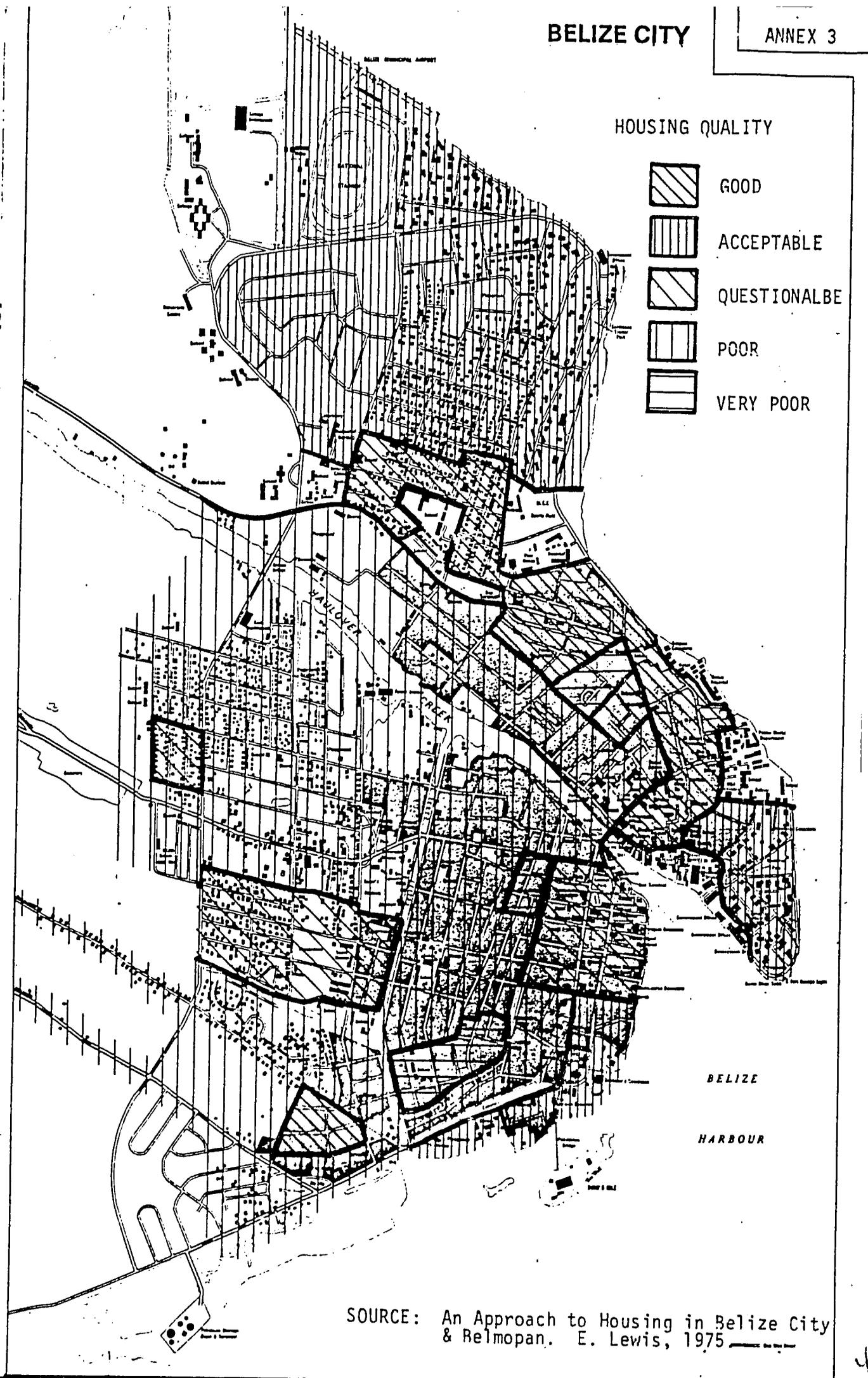
	<u>1970 Total</u>	<u>1980 Total</u>	<u>1980 Males</u>	<u>1980 Females</u>	<u>1970 Households</u>	<u>1980 Households</u>
Belize City North Side	13,582	14,378	6,935	7,443	--	3,083
Belize City South Side	25,468	25,393	12,240	13,153	--	5,354
<b>Belize City Total</b>	<b>39,050</b>	<b>39,771</b>	<b>19,175</b>	<b>20,596</b>	<b>7,945</b>	<b>8,437</b>
Belize District Rural	10,305	11,030	5,830	5,200	2,081	2,222
<b>Belize District Total</b>	<b>49,355</b>	<b>50,801</b>	<b>25,005</b>	<b>25,796</b>	<b>10,026</b>	<b>10,659</b>
Corozal Town	4,682	6,899	3,454	3,445	873	1,322
Corozal Rural	10,869	16,003	8,546	7,457	1,971	2,734
<b>Corozal District Total</b>	<b>15,551</b>	<b>22,902</b>	<b>12,000</b>	<b>10,902</b>	<b>2,844</b>	<b>4,056</b>
Orange Walk Town	5,539	8,439	4,264	4,175	929	1,485
Orange Walk Rural	11,502	14,431	7,740	6,691	1,945	2,518
<b>Orange Walk Dist. Total</b>	<b>17,041</b>	<b>22,870</b>	<b>12,004</b>	<b>10,856</b>	<b>2,874</b>	<b>4,003</b>
Dangriga	6,967	6,661	3,188	3,473	1,455	1,371
Stan Creek Rural	6,056	7,520	3,952	3,568	1,261	1,563
<b>Stan Creek Dist. Total</b>	<b>13,023</b>	<b>14,181</b>	<b>7,140</b>	<b>7,041</b>	<b>2,716</b>	<b>2,934</b>
Punta Gorda	2,131	2,396	1,129	11,267	425	509
Monkey River Town	277	190	98	92	53	32
Toledo Rural	6,581	9,176	4,692	4,484	1,277	1,748
<b>Toledo Dist. Total</b>	<b>8,989</b>	<b>11,762</b>	<b>5,919</b>	<b>5,843</b>	<b>1,755</b>	<b>2,289</b>
San Ignacio	4,327	5,616	2,669	2,947	748	982
Beque Viejo del Carmen	1,903	2,435	1,181	1,254	329	452
Cayo Rural	9,471	11,851	6,216	5,635	1,712	2,093
Belmopan	274	2,935	1,483	1,452	(61)	669
<b>Cayo District Total</b>	<b>15,975</b>	<b>22,837</b>	<b>11,549</b>	<b>11,288</b>	<b>2,789</b>	<b>4,196</b>
<b>Belize Total</b>	<b>119,934</b>	<b>145,353</b>	<b>73,617</b>	<b>71,736</b>	<b>23,065</b>	<b>28,137</b>

\* Adapted from Second Provisional 1980 Population Figures, 1980 Census.

Central Government Salary Scale - 1981\*

<u>Post</u>	<u>Salary in US\$</u>
Chief Justice	US\$12,279
Financial Secretary	11,402
Permanent Secretary	8,966 - 10,517
Heads of Department	8,966 - 10,187
Administrative Officer	4,922 - 7,194
Accountant	4,401 - 7,194
Clerk	1,693 - 4,516
Secretary	3,216 - 4,516
Typist	1,693 - 3,195
Messenger	971 - 1,240

\*From the Labor Commissioner, Ministry of Labor, Social Services, and Community Development. These salaries reflect recent increases in pay authorized by government and to that extent are provisional



SOURCE: An Approach to Housing in Belize City & Belmopan. E. Lewis, 1975

## DOMESTIC ELECTRICITY

<u>CONSUMERS</u>	<u>1979</u>	<u>1980</u>
Belize City	7974	7759
Belmopan	2098	690
Roaring Creek		130
Corozal Town	1849	1976
Orange Walk Town	1450	1606
San Ignacio		976
Benque Viejo		489
Dangriga	933	999
Punta Gorda	425	388
San Pedro	238	272
Caye Corker	133	136
Hattieville		124
Burrel Boom		125
	<u>15,100</u>	<u>15,690</u>
ELECTRICITY CONSUMED (in 000 KWH)	15,693	16,421

## ELECTRICITY RATES (effective August 1, 1979)

Belize City - Minimum charge for 15 KWH and less \$2.00 per month

A 0-250 sq. ft.	B 251-500 sq. ft.	C 501-1000 sq. ft.	D over 1000 sq. ft.
First 15 Kwhs @ .155	20 Kwhs @ .155	25 Kwhs @ .155	30 Kwhs @ .155
Next 50 Kwhs @ .135	50 Kwhs @ .135	50 Kwhs @ .135	50 Kwhs @ .135
Next 250 Kwhs @ .115	250 Kwhs @ .115	250 Kwhs @ .115	250 Kwhs @ .115
All)			
Over) 315 Kwhs @ .105	320 Kwhs @ .105	325 Kwhs @ .105	330 Kwhs @ .105

The Districts - Minimum charge for 10 KWH and less \$1.25 per month

First 25 Kwhs @ .175
Next 25 Kwhs @ .150
Next 50 Kwhs @ .125
Next 100 Kwhs @ .115
Next 1000 Kwhs @ .105
All over 1200 Kwhs @ .100

## Fuel (P) Charge, Effective 1 May 1979

For every one cent increase in the base price paid for deisel fuel in Belize City on 1 January 1979 a corresponding increase or decrease of one-tenth of one cent per Kwh shall be made in monthly charges for energy. Presently the monthly charge is 5.125 cents per Kwh.

## IMPORTATION FEES FOR SELECTED BUILDING MATERIALS

<u>Material</u>	<u>Import Tax (%)</u>	<u>Stamp Duty (%)</u>	<u>Total Fees (%)</u>
Steel Rebar	10	5	15
Plywood*	20	5	25
Windows, Doors	40	5	45
Roofing Material*			
GI less than 3 mm	25		25
asbestos tile & sheet	25	5	30
Nails*	15		15
House Wiring	15	5	20
Glass	20	5	25
Electrical Fixtures	25	5	30
Plumbing Fixtures			
Ceramic	25	5	30
Plastic	30	5	35
PVC Pipe		5	5
Bug Screening			
Plastic	30	5	35
Metal	20	5	25
Hardware	25	5	30
Cement Block	45	5	50
Brick	25	5	30

Cement - \$2.92/ton (2200 lbs.)

Lumber (unfinished) - \$1.25/1000 board feet

\* Import License required

Figures given are as a percentage of CIF (Charges, Insurance and Freight)  
Changes to fees become effective at beginning of fiscal year - April 1.

Source: Customs and Excise Office

## Organizational Structure of GOB

Belize is a Commonwealth country and as such the executive authority is vested in Her Majesty the Queen. The Queen is represented by the Governor General who exercises, subject to the provisions of the Consitution, the executive authority.

### Prime Minister's Office

The Prime Minister is appointed by the Governor General and is that member of the House of Representatives who is the leader of the majority political party. The Governor General, in accordance with the advice of the Prime Minister, designates a Minister as Deputy Prime Minister.

### The Cabinet

The Cabinet consists of the following Ministries: Foreign Affairs; Finance and Economic Development; Defense and Home Affairs; State; Natural Resources; Works; Trade and Industry; Attorney General; Education and Sports; Local Governmen. and Social Security; Labour, Social Services and Community Development; Health, Housing and Cooperatives; Energy and Communications.

### National Assmebly

The National Assembly is made up of the House of Representatives and the Senate.

### House of Representatives

Elected for a 5 year term unless the National Assembly is dissolved sooner. There are 18 members of the House, with representation as follows: Belize District 8 members, and two seats each for the remaining 5 districts.

The Senate

The Senate consists of eight members appointed by the Governor General in the following manner:

- 5 in accordance with the advice of the Prime Minister
- 2 in accordance with the advice of the Leader of the Opposition
- 1 after consultation with the Belize Advisory Council

The Senate serves for the full 5 year term unless the National Assembly is dissolved sooner.

Judiciary

Appointed by the Governor General on advice of the Legal Commission.

## PERSONS CONSULTED

February, 1982

Mr. Richard Barnaby, Charge d'Affaires, U.S. Embassy  
 Mr. George Fitch, Economic/Commercial Officer, U.S. Embassy

The Honorable Mr. Assad Shoman, Minister of Health, Housing & Cooperatives  
 The Honorable Mr. Said Musa, Minister of Education and Sports  
 Mr. Vernon Telford, Director Development Finance Corporation (DFC)  
 Mr. Hugh Fuller, Director RECONDEV  
 Mr. John Hertular, Director Housing and Planning Department  
 Mr. Eustace Usher, Permanent Secretary, Ministry of Health, Housing & Cooperatives

## Meeting with Funding Group, Belize National Building Society:

Mr. Harris Spence  
 Mr. Billy Musa, Sr.  
 Mr. Eric Fairweather  
 Mr. Glenn Rodfrey  
 Mr. Said Musa

## Meeting with Belize Credit Union League:

Mr. William Tillett, President, St. John's Credit Union  
 Mr. Edward (Ned) Pitts, Vice President, Civil Service Credit Union  
 Ms. Zeta Bennett, Vice President, Wesley Credit Union  
 Mr. Joel Arnold, Director, Teachers Credit Union  
 Mr. Dinsdale Lord, Acting Executive Director, Belize Credit Union League

Ms. Velda Aguet, Director, Council of Voluntary Services (Belize City)  
 Ms. Elsa August, Social Worker, Social Development Department (Belize City)  
 Mr. Bautista, Development Finance Corporation  
 Mr. Clarence Borland, Head, Central Planning Unit, Ministry of Finance/  
 Economic Development  
 Mr. Bryan Card, Statistician, Central Planning Unit, Ministry of Finance &  
 Economic Development  
 Mr. Kent Card, Accountant, Valuation Board  
 Mr. Winston Carr, Labor Commissioner, Ministry of Labor/Social Services/  
 Commercial Development  
 Mr. Roy Cayetano, Education Officer, Ministry Education & Sport  
 Mr. Walter Craig, Caribbean Development Bank  
 Mr. Cruze, Banana Control Board  
 Mr. Leo Cuellar, Manager, Belize Social Security Board  
 Ms. Cynthia Ellis, Consultant, Council of Voluntary Services  
 Mr. Alvan Fuller, Director, Belize International Insurance Co., Ltd.  
 Mr. Ghraham, Controller, Plantation Manager, Banana Control Board  
 Mr. Chris Hunt, Chief Engineer, Ministry of Works  
 Mr. A. S. Johnson, Building Contractor, Belize City  
 Mr. Emory King, Real Estate Agent  
 Mr. Luis Lindo, Deputy Director, Peace Corps  
 Mr. E. D. Lewis, Architect/Planner, Belize City  
 Mr. Joseph Longworth, Deputy Commissioner of Lands, Ministry of Lands

Mr. Robert C. Mahler, Consulting Engineers Ltd.  
Mr. Cirilo Mahung, Assistant Manager, DFC  
Mr. James Moynihan, Project Manager, CIDA funded Water & Sewer Project for Belize City  
Ms. Elaine Middleton, Director, Red Cross Society, Belize City  
Mr. Jeffrey O'Brien, Building Contractor, Belize City  
Mr. Denis Orloski, Architect, Peace Corps, Ministry of Works  
Mr. John J. Quan, Managing Director William Quan & Co., Importers, Distributors, Belize City  
Mr. Godfrey Ramcs, Director of Personnel, Banana Control Board  
Mr. S. A. Roberts, Statistician, Central Planning Unit, Ministry of Finance & Economic Planning  
Ms. Dorothy Rozga, UNICEF; working with Ministry of Social Services  
Mr. Kelvin Sanderson, UNDP, Project Development Economist, Belize Public Investment Project  
Mr. Harold Silcox, Director, CARE  
Mr. Smith, Deputy Director, RECONDEV  
Mr. Snare, Commissioner of Lands, Ministry of Lands  
Mr. Sosa, Assistant Controller of Customs, Customs and Excise Office  
Mr. Martin Taylor, Economic Advisor to Ministry of Finance & Economic Development  
Mr. Michael Usher, Administrator RECONDEV, Belize City  
Mr. Joseph Waight, Population & Trade Officer, Planning Unit, Ministry of Finance and Economic Development

Table 5.2: BELIZE - PUBLIC SECTOR INVESTMENT PROGRAM 1982-85  
(In \$ '000)

Page 1 of 2 pages

ONGOING PROJECTS	1982			1983			1984			1985		
	Total	External	Local	Total	External	Local	Total	External	Local	Total	External	Local
<u>Agriculture</u>												
Rural Development-Toledo	498	498	-	-	-	-	-	-	-	-	-	-
Veterinary Laboratory	900	900	-	400	400	-	-	-	-	-	-	-
Banana Irrigation Equipment	3,029	3,029	-	-	-	-	-	-	-	-	-	-
Small Farmers Credit	147	147	-	-	-	-	-	-	-	-	-	-
DFC Crop Loan Scheme	115	115	-	-	-	-	-	-	-	-	-	-
Farm & Agricultural Credit 1/	1,266	1,266	-	-	-	-	-	-	-	-	-	-
Land Development	900	-	900	900	-	900	900	-	900	900	-	900
Coconut Rehabilitation	100	100	-	78	78	-	-	-	-	-	-	-
Toledo Rural Roads	300	300	-	-	-	-	-	-	-	-	-	-
<u>Industry</u>												
Agro-Industry Credits 1/	-	-	-	-	-	-	-	-	-	-	-	-
Industrial Credit 1/	729	729	-	600	600	-	-	-	-	-	-	-
Industrial Estates 1/	250	210	40	400	360	40	400	360	40	-	-	-
Food Processing Equipment	75	75	-	-	-	-	-	-	-	-	-	-
<u>Tourism</u>												
Belizean Hotel	2,000	2,000	1,000	1,100	500	600	-	-	-	-	-	-
<u>Transportation</u>												
Bridges	1,000	-	1,000	1,000	-	1,000	1,000	-	1,000	1,000	-	1,000
Streets and Equipment	2,000	-	2,000	2,000	-	2,000	2,000	-	2,000	2,000	-	2,000
Western Highway	148	148	-	-	-	-	-	-	-	-	-	-
Northern Highway	2,142	2,142	-	-	-	-	-	-	-	-	-	-
H. Highway-Casalace-Exeranza	333	333	-	-	-	-	-	-	-	-	-	-
Coastal Protection	59	59	-	-	-	-	-	-	-	-	-	-
Harbor Board	80	80	-	35	35	-	-	-	-	-	-	-
Belize Int. Airport-Apron	555	555	200	-	-	-	-	-	-	-	-	-
District Airstrip Improvement	100	-	100	100	-	100	100	-	100	100	-	100
Feeder Roads	400	-	400	400	-	400	400	-	400	400	-	400
Southern Highway Bridges	300	300	-	-	-	-	-	-	-	-	-	-
<u>Power</u>												
District Electricity Expansion	7,000	5,365	1,635	7,093	5,458	1,635	-	-	-	-	-	-
Belize City Electricity Expansion	10,000	7,900	2,100	10,000	7,900	2,100	-	-	-	-	-	-
Energy Development	267	267	-	-	-	-	-	-	-	-	-	-
<u>Water</u>												
Louisiana Farm Water Supply	49	49	-	-	-	-	-	-	-	-	-	-
Orange Walk/Corozal Water Supply	80	80	-	-	-	-	-	-	-	-	-	-
<u>Education</u>												
Rural Junior Secondary Schools	625	625	-	-	-	-	-	-	-	-	-	-
Primary Schools	600	600	-	440	440	-	-	-	-	-	-	-
Youth Development Center	230	220	-	-	-	-	-	-	-	-	-	-
<u>Housing</u>												
Low-Cost Housing	600	-	600	600	-	600	600	-	600	600	-	600
<u>Health</u>												
Hopkins Health Center	100	100	-	-	-	-	-	-	-	-	-	-
Independence Health Center	60	60	-	-	-	-	-	-	-	-	-	-
<u>Communications</u>												
Telephone Expansion	1,300	-	1,300	-	-	-	-	-	-	-	-	-
Airport Fire Station	388	388	-	-	-	-	-	-	-	-	-	-
Fire Fighting Equipment	1,000	1,000	-	-	-	-	-	-	-	-	-	-
<u>Others</u>												
Reclamation	400	-	400	400	-	400	400	-	400	400	-	400
Basic Human Needs	230	230	-	229	229	-	-	-	-	-	-	-
Minor Local Projects	2,500	-	2,500	2,500	-	2,500	2,500	-	2,500	2,500	-	2,500
Community Projects	400	-	400	400	-	400	400	-	400	400	-	400
Public Investment Project	334	334	-	-	-	-	-	-	-	-	-	-
Student Loan	90	90	-	95	95	-	100	100	-	105	105	-
Mission Administered Fund	170	170	-	170	170	-	170	170	-	170	170	-
UK Scholarships	120	120	-	120	120	-	120	120	-	120	120	-
<b>TOTAL - ONGOING PROJECTS</b>	<b>44,769</b>	<b>29,636</b>	<b>15,075</b>	<b>29,060</b>	<b>16,385</b>	<b>12,675</b>	<b>9,090</b>	<b>750</b>	<b>8,340</b>	<b>3,695</b>	<b>375</b>	<b>3,300</b>

1/ Extended under 'new projects'.

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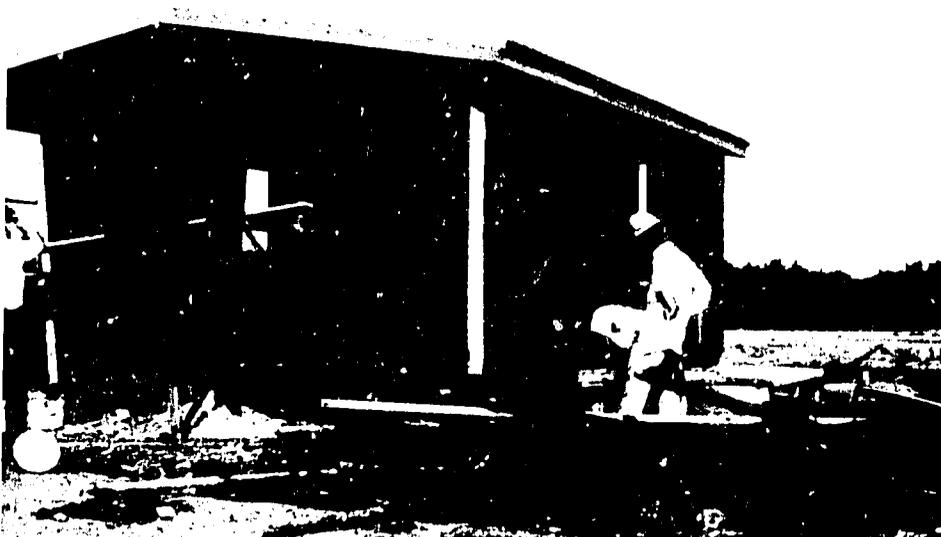
Table 3.7: BELIZE - PUBLIC SECTOR INVESTMENT PROGRAM 1981-85  
(\$25 '000)

NEW PROJECTS	1982			1983			1984			1985		
	Total	External	Local									
<b>Agriculture</b>												
Bananas :												
Agriculture Training School	2,500	1,500	1,000	3,000	4,000	1,000	9,000	5,000	1,200	6,200	5,000	1,200
Regional Agricultural Project	580	580	-	580	980	-	-	-	-	-	-	-
Rice (Big Falls) Project	600	600	-	1,400	1,400	-	2,600	2,600	-	600	300	-
Edible Oils and Fats	5,200	4,000	1,200	5,200	4,000	1,200	1,000	1,000	500	-	-	-
Seed Production	-	-	-	-	-	-	2,200	2,000	1,200	2,800	1,600	1,200
Special Agricultural Projects	-	-	-	500	300	200	500	300	200	-	-	-
Citrus Industry	-	-	-	-	-	-	400	300	100	-	-	-
Agriculture Credits	2,000	2,000	-	3,000	1,500	-	2,000	2,000	-	2,600	2,100	500
Tobacco Rural Development Project	2,750	2,450	300	3,000	2,550	350	3,250	2,550	-	-	-	-
Central Belize Land Development	4,000	4,000	-	6,000	6,000	-	5,000	5,000	1,400	6,400	5,000	1,400
Farm Development Credits I	-	-	-	2,000	3,000	-	3,000	4,000	1,300	3,000	4,000	1,300
Integrated Forest Resources	-	-	-	3,000	3,000	-	3,000	3,000	-	3,000	3,000	-
Pilot Fish Farm	200	200	-	1,400	900	500	1,400	900	500	-	-	-
<b>Industry</b>												
Sugar Refining	1,000	-	1,000	3,000	-	3,000	2,000	3,000	3,000	-	-	-
Industry and Agro-Industry Credits	1,130	950	200	1,350	1,130	220	1,600	1,340	260	1,900	1,580	320
Processing and Packaging	-	-	-	-	-	-	1,600	1,500	300	2,200	1,300	900
Industrial Estates	-	-	-	-	-	-	500	400	200	2,400	1,600	800
<b>Energy</b>												
Mini-Hydro Scheme	150	100	50	250	300	50	-	-	-	-	-	-
Wood-Chip Power Station Study	200	200	-	-	-	-	-	-	-	-	-	-
Hydro-Electricity Feasibility Study	-	-	-	-	-	-	100	50	50	100	50	50
<b>Transportation</b>												
Export Transportation Master Plan	100	100	-	100	100	-	-	-	-	-	-	-
Western Highway (Reconstruction)	1,900	1,000	-	2,000	2,000	-	1,000	1,000	-	-	-	-
<b>Civil Aviation</b>												
Belize International Airport Terminal	-	-	-	1,000	1,500	-	4,000	4,000	-	3,000	3,000	-
Airport VCR/DME	-	-	-	300	300	-	286	286	-	-	-	-
Runway Extension-BLA	500	500	-	1,400	1,400	-	1,500	1,500	-	-	-	-
<b>Health</b>												
Belize City Hospital	-	-	-	3,500	2,000	1,500	10,400	8,000	2,400	16,100	12,500	3,600
Hospital Equipment	160	160	-	160	160	-	-	-	-	-	-	-
Renovation of Health Centers	56	60	6	88	80	8	96	84	12	-	-	-
Public Health Vehicles	160	160	-	160	160	-	-	-	-	-	-	-
<b>Water and Sewerage</b>												
Belize City Water & Sewerage - Phase I&II	6,000	5,000	1,000	6,000	5,000	1,000	6,000	5,000	1,000	6,000	5,000	1,000
Rural Water Supply	200	200	-	200	200	-	200	200	-	200	200	-
Water Supply - Corozal Villages	-	-	-	222	222	-	222	222	-	-	-	-
<b>Education</b>												
Museum/Archives	200	200	-	400	400	-	250	250	-	-	-	-
Junior Secondary Schools	400	-	400	1,000	1,000	-	1,000	1,000	-	400	400	-
Vocational Training Center	-	-	-	200	200	-	400	400	-	-	-	-
Public Sector Training Center	100	100	-	100	100	-	-	-	-	-	-	-
Teachers' Houses	240	200	40	340	300	40	120	120	-	-	-	-
Expansion of REAP	100	100	10	110	100	10	20	20	-	-	-	-
Expansion of BELCAST	240	200	40	360	300	60	360	300	60	240	200	40
National Vocational Training	110	100	10	160	140	20	160	140	20	170	152	18
<b>Housing</b>												
Housing Development	2,000	1,200	800	4,500	2,300	1,800	4,600	2,800	1,800	4,800	2,800	2,000
<b>Others</b>												
Fire Station - Belize City	-	-	-	200	200	-	300	300	-	-	-	-
New Post Office	-	-	-	500	450	50	1,000	900	100	-	-	-
<b>TOTAL - NEW PROJECTS</b>	<b>31,916</b>	<b>23,860</b>	<b>6,056</b>	<b>60,280</b>	<b>49,272</b>	<b>11,008</b>	<b>79,764</b>	<b>63,562</b>	<b>16,202</b>	<b>70,410</b>	<b>55,532</b>	<b>14,878</b>
<b>SUMMARY</b>												
Ingoing Projects	44,769	29,694	15,075	29,060	16,385	12,675	9,030	750	8,280	3,695	295	8,300
New Projects	31,916	23,860	6,056	60,280	49,272	11,008	79,764	63,562	16,202	70,410	55,532	14,573
<b>TOTAL</b>	<b>76,685</b>	<b>53,554</b>	<b>21,131</b>	<b>89,340</b>	<b>65,657</b>	<b>23,683</b>	<b>88,824</b>	<b>74,312</b>	<b>24,482</b>	<b>74,105</b>	<b>55,927</b>	<b>23,173</b>



This canal in Belize City is used for garbage and sewer disposal.

This burnt-out structure is a result of the ever-present fire hazard in Belize City.

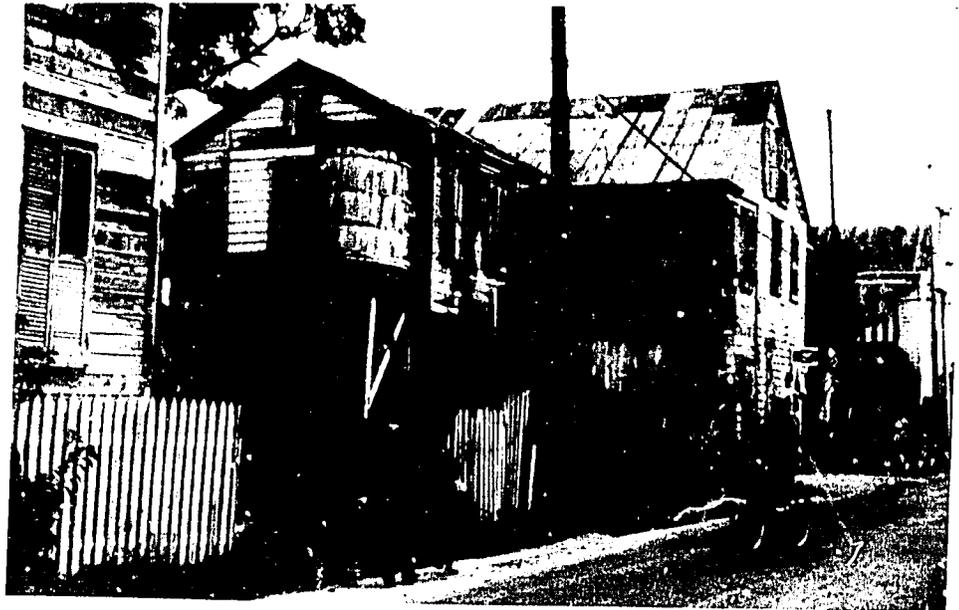


This Ministry of Housing experimental unit uses the indigenous palmento palm and plaster for wall construction. Approximate cost is US\$7,000.



A well-maintained side street in Belize City demonstrates the potential for improvement in debilitated sections.

This scene of deteriorating housing is typical of many sections in Belize City.



This common state of delapidation of Belize City housing suggests the need for more investment in home improvement and upgrading of existing stock.

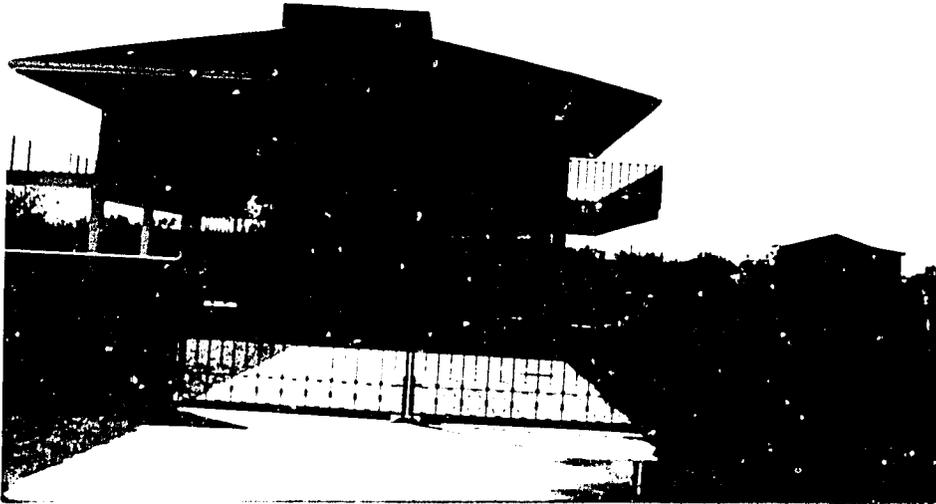


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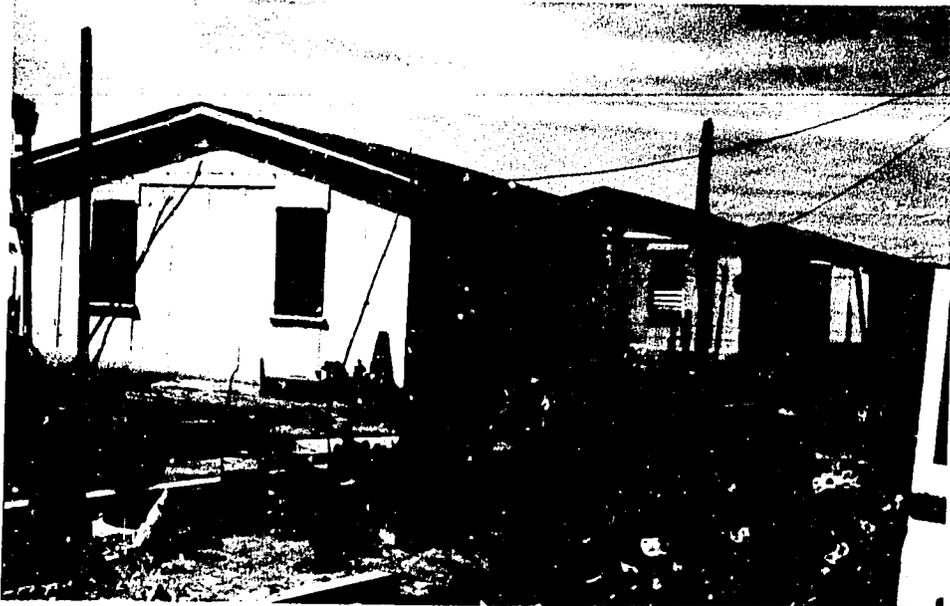


A high income house in Belize City costs about \$55-60/SF...

...while a medium-high income house costs about \$US30-40/SF.



Single family units in Ladyville built by the RECONDEV in 1979 sold for US\$5,000.



Ministry of Housing concrete-panel structures such as these were built for low-income families at a current construction cost of about US\$8,000.

One of the few examples of squatter housing in Belize City.



These houses in Stann Creek District are furnished by citrus producers and rented to agricultural laborers.

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