

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add  
 C = Change  
 D = Delete

Amendment Number

DOCUMENT CODE  
3

2. COUNTRY/ENTITY  
GUATEMALA

3. PROJECT NUMBER

520-HG-004

4. BUREAU/OFFICE

5. PROJECT TITLE (maximum 40 characters)

GOG/Private Sector Low-Cost Housing

LEC/PRE/H

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD , YY  
1 2 3 1 3 5

7. ESTIMATED DATE OF OBLIGATION  
(Under 'B' below, enter 1, 2, 3, or 4)

A. Initial FY 8 2 B. Quarter 4 C. Final FY 8 4

8. COSTS (\$000 OR EQUIVALENT \$1 = Q. 1.00)

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	10,000		10,000			10,000
(Grant)	( )	( )	( )	( 300 )	( )	( 300 )
(Loan) HG	( 10,000 )	( )	( 10,000 )	( )	( )	( 10,000 )
Other U.S. 1.						
Other U.S. 2.						
Host Country		2,000	2,000		10,000	10,000
Other Donor(s) Beneficiaries					2,200	
<b>TOTALS</b>	10,000	2,000	12,000	300	12,200	22,500

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1)	724	721	862			300	10,000	300	10,000
(2)									
(3)									
(4)									
<b>TOTALS</b>						300	10,000		10,000

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code BU  
B. Amount 10,300

13. PROJECT PURPOSE (maximum 480 characters)

The purpose of this pilot program is to support the GOG and private sector to reorient their efforts so that basic shelter can be produced which is affordable by families with incomes below the median.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final MM YY  
1 1 8 3 1 1 8 4 1 2 8 5

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000  941  Local  Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a \_\_\_\_\_ page PP Amendment.)

17. APPROVED BY

Signature  
Peter Kolar  
Title  
Acting Director, USAID/Guatemala

Date Signed  
MM DD YY  
0 9 0 9 8 2

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

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## I. SUMMARY AND RECOMMENDATIONS

### A. Introduction

The \$10 million HG combined with the \$10 million contribution of the GOG will support the private sector in constructing and financing new shelter for families below the median income. The one-to-one counterpart funding for this HG program is unusually high and demonstrates the turn-about of the GOG on the issue of low-cost housing.

The program is the first AID bilateral shelter assistance in more than 17 years and has been designed as a pilot effort to test the feasibility of increasing the private sector's role in channeling resources to low-cost housing. The objective is to use the HG program as the basis for dialogue with the GOG on crucial shelter policies and strategies, such as the mobilization of new housing resources, construction standards, the role of municipal governments, the participation of the informal sector in shelter delivery systems, and upgrading of the existing stock and infrastructure. A follow-up HG program is tentatively planned for FY 1984 in support of the broader shelter framework which the Mission plans to develop with the GOG during the course of implementation of this program.

The program, however, is not only securing a place for AID at the decision-making table of the GOG. The program is addressing the GOG's explicit commitment to the housing needs of low-income families and responds directly to the vacuum being felt by private developers and commercial institutions which have seen the high cost housing market reach a saturation point in the last two years.

The HG program does not call for the creation of new systems or institutional arrangements, but rather the redirection of an existing structure to work with low-income groups. This should alleviate a key problem which has been identified in the sector: the heavy reliance on government-owned institutions, BANVI and BANDESA, for the production of shelter for low-income groups.

The efforts to mobilize resources for the target group under the CABEI 004 program are being extended by having the private sector involved for the first time in housing production for this income level. After this program is completed, the mobilization of additional internal resources is expected as the private builders and banks are shown that a market and profit potential exists which is largely untapped and, therefore, internal resources can be safely invested. The program is being developed in accordance with the internal financial market of the country which makes the mortgages and bonds suitable for future discount in the secondary market. Finally, the technical assistance planned for the program will be used to explore and expand the study carried out under CABEI 004 (See Annex VI) on ways to attract free savings and to increase the availability of resources for the sector.

## B. Evolution of Program

The Guatemalan Urban Shelter Improvement Project (596-HG-004) includes a \$200,000 grant of which \$50,000 was intended to support efforts by the GOG to study the possibilities of establishing a mechanism to mobilize and channel additional resources for basic shelter programs. At the time that the Project was authorized, it was anticipated that this would be accomplished by the creation of a savings and loan system.

Since 1967 when the last bilateral HG program was authorized, AID has supported the establishment of a savings and loan system. By 1980, it became evident that the S&L law would not be approved because of opposition both within the government and among the private banking sector. An agreement was then signed with the General Secretariat of the National Economic Planning Council (SGCNPE) under which the \$50,000 grant would be used to analyze alternatives to the S&L system which could accomplish the original objective of increasing the flow of resources toward basic shelter programs. The concern was a dual one -- how to increase the availability of funds for shelter programs to the target group and how to channel them effectively, given the reliance upon and limitations of the only two institutions financing basic shelter, BANVI and BANDESA.

A study was undertaken in August 1981 to explore the feasibility of channeling resources for basic shelter through the existing Guatemalan public and private banking institutions. The preliminary conclusion of this study was presented on October 29, 1981 at a meeting of representatives from AID, the SGCNPE and the Minister of Finance. The conclusion essentially was that an existing rediscount facility in the Bank of Guatemala through which government funds are already being channeled for high cost housing (\$40-50,000) could be used as well to finance basic shelter.

As a result of this meeting, the then Secretary General of the National Economic Planning Council wrote a letter to AID dated November 17, 1981 indicating his interest in concluding the study and requesting that AID consider providing financial assistance to implement the study's recommendations.

These actions resulted in the drafting of a PID which was approved by the LAC DAEC January 21, 1982. Subsequent to approval, a small team consisting of two consultants financed under the previously mentioned \$50,000 grant and AID personnel initiated a broader dialogue with the principal actors and institutions that comprise the shelter finance and delivery system. Their task was to determine the feasibility of adopting a more rational interest rate policy, the interest of private banks in reorienting their activities to work with the AID target group, the interest of private contractors and promoters to develop and market low cost shelter solutions and the willingness of FHA to adopt construction standards that permit low-cost housing to be insured. Extensive discussions were conducted at that time and during the drafting of the Project Paper. They involved the Minister of Finance, the Vice-President of the Bank of Guatemala, the President of FHA, the General

Secretary of the National Economic Planning Council, the President of BANVI, presidents of five commercial banks, the Chamber of Construction and the Association of Housing Contractors. Based on those conversations it was determined that the institutions involved were indeed interested in carrying out a pilot program which tested the feasibility of reorienting the private sector shelter finance and delivery system to serve the needs of the AID target group. An important key was the positive response by the banks to work with contractors who would promote such projects and participate in the program. Also, private builders expressed willingness to take the risk in developing projects with private institutions. Previously they worked only with BANVI on such projects and did not have to worry about promoting projects, selling units and interim financing.

The reasons for this attitude and cooperation on the part of all those contacted are as follows: (1) Low income families have been the least served by the shelter finance and delivery system; (2) the Government of Guatemala which has been in power since March 23, 1982 issued its Short Range National Economy Policy in which it indicated its interest in the development of an increased volume of housing for the target group; (3) low income families represent an enormous undeveloped market; (4) construction companies are operating at well below their capacity and such projects can generate employment; (5) FHA seeks to continue and expand its insurance program to new markets; and (6) the economy has experienced short-falls in foreign exchange and the Housing Guaranty program can provide some hard currency.

During Project Paper development a demand study was conducted which confirmed the premise that low income families desire to acquire basic and minimal shelter solutions. The study sample was visually drawn from low income neighborhoods and therefore it was skewed to families with incomes below the 20th percentile. Nevertheless, that segment of the market expressed strong willingness to purchase the lowest cost units. Demand was most evident in Guatemala City and Escuintla. It was less in Quezaltenango which has been affected adversely by political violence. Demand for higher cost solutions existed among families that had the paying capacity.

Based upon the Mission's dialogue and the studies carried out, it was decided that a pilot program would be appropriate at this time to test the feasibility of redirecting the existing shelter finance and delivery system to serve the needs of the AID target group.

### C. Summary Program Description

#### 1. Goal and Purpose

The goal of the program is to improve the living conditions of the urban poor in Guatemala. The purpose of the program is to test, in conjunction with the GOG, the ability of the private sector's existing mechanisms for the finance and construction of shelter to reach families below the median income. The program responds to the interest of the GOG and the private shelter delivery system to satisfy the demand for housing by the poor in the capital and other urban areas.

## 2. Program Components

The key components of the program are as follows:

(a) The production of low cost shelter solutions consisting of core units ranging in size from 30m<sup>2</sup> to 50m<sup>2</sup> and a serviced lot with a sanitary core unit. Private promoters will be organizing and promoting such solutions to be acquired by the target group and contractors will construct such units.

(b) Testing the adaptation of an already existing mechanism which facilitates and encourages the participation of all existing private and public banking institutions in financing basic shelter on a national scale. The Bank of Guatemala will utilize the vehicle of a trust fund which has been employed in the past to finance the production of units for upper and high-middle income families. The standards and procedures will be adapted to serve low income families. These arrangements are described in the next section. The interest rates to be used for long-term mortgage financing will be consistent with the internal costs of financing.

## 3. Institutional Arrangements

The following roles and institutions will be involved:

(a) Ministry of Finance (MOF): Will contract and guarantee the \$10 million HG loan.

(b) Bank of Guatemala (BGG): Will establish a line of credit in a trust account and channel funds to approved FHA's institutions.

(c) FHA: Will establish criteria for eligible projects; it will promote mortgage insurance for such projects and will coordinate disbursements with Bank of Guatemala.

(d) Approved Institutions: Private banks and BANVI will receive project proposals, process loans, coordinate with FHA, administer debt service of long-term mortgages and provide mortgage and construction financing. (BANDESA and FENACVI are not approved entities, but may function as promoters in this program.)

(e) Promoters: Will identify projects, execute projects and organize the market and sales.

In addition, the Ministry of Finance has named a committee consisting of high level personnel from the Ministry of Finance, the Secretary General of the National Economic Planning Council, the Bank of Guatemala, the FHA, and BANVI which will monitor the implementation of the program and examine the mechanism used in this program and how it can be continued or modified to continue the flow of resources to the shelter sector. FHA will

act as the secretary of the committee. A second committee will be established by FHA to address shelter construction standards and related environmental issues. This group will include FHA, the Municipality of Guatemala and private builders.

#### 4. Financial Plan Summary

Total cost = \$22.5 million.

(a) AID/US private investor - \$10 million.

(b) GOG will provide \$10 million in Quetzales to complement the HG loan.

(c) Beneficiaries will provide approximately \$2,000,000 in down payments.

(d) AID will provide \$300,000 in Development Grant assistance for technical support: one long-term advisor for eighteen months and short-term assistance in housing finance policy and strategies, development of new construction standards and environmental guidelines and the formulation of credit analysis criteria and procedures.

#### D. Issues

The following addresses specific policy considerations raised during the PID review. Further discussions of the issues are included in the pertinent sections of the Paper.

##### 1. Mobilization of Resources

In view of the amount originally requested in the PID (\$20 million) as opposed to the proposed \$10 million, the definition of a long-term strategy for the mobilization of internal resources for financing low-cost shelter was raised as a critical issue. The immediate problem facing Guatemala is not so much the mobilization of resources for housing the target population, but rather the need to convince the institutions with access to available resources to lend to a different group, i.e. families with incomes well below the clientele they have served regularly for many years. Therefore, the Mission believes that the first stage in long-range resource mobilization for low-income families is demonstrating to the key institutions like FHA and the private commercial banks that a large and profitable market exists in the field of low-cost shelter. The second step in the resource mobilization strategy involves tapping the internal savings market. Assuming developers and financial entities are convinced of the validity of opening up this new market, a portion of new savings will be channeled to the target group.

For a number of years, the Mission has advocated the creation of a savings and loan system, precisely with the objective of generating new

resources for shelter. However, because of the resistance encountered to that proposal, AID initiated studies under CABEI 004 on the potential for attracting additional resources under the existing structure. Those studies will be amplified under this program. ANNEX VI presents the results of the first of these studies and shows: a) in Guatemala, it is not necessary to distinguish between passbook savings and time deposits because the interests paid are similar for both; b) furthermore, the banks have not tried, to date, to exploit the massive potential of the small savers market; and c) the incorporation of below median income families as borrowers (the main thrust of this program) and a major campaign for their savings should substantially increase the availability of resources for shelter. The program's technical assistance component will provide for the continuation and expansion of analyses on these preliminary findings.

The third stage in resource mobilization involves the potential for the discount of the bonds generated through this and other programs in the open market. At issue is the magnitude of the potential for open market sales since, in essence, the Bank of Guatemala (the central bank) has long been the main discount facility for mortgage bonds issued by BANVI and private finance institutions. Recently, BANVI sold \$2 million in bonds to a private bank which indicates that possibilities for market expansion exist. In fact, the interest rate charged beneficiaries of the program (13%) is over the rate paid by commercial banks for large deposits (10% for deposits over \$100,000) which makes the mortgage bonds very attractive.

The above comments deal with the long-term resource strategy. At this first stage, the Bank of Guatemala will need to play the principal role as the holder of the mortgage papers generated through the program while the lending institutions develop the new market for low-income shelter. In terms of the Bank of Guatemala selling these mortgage bonds, it should be noted that the expected yield of 8% per annum is slightly higher than the average yield on savings which is now 7.2%. The mortgage bonds are more attractive because their interest is tax free; another advantage for the financial institutions is that investment in such bonds does not affect internal lending rates in relation to their capital.

The Mission feels that this pilot program would provide a sound framework for the mobilization of resources for the target group in the years ahead.

## 2. Institutional Arrangements

The program will support the redirection of well-established and capable institutions toward serving new clientele, low-income families. BANVI, as one of FHA's approved entities, can participate directly in the program. BANDESA, FENACOV, and other institutions could participate under the auspices of several of the approved institutions. The Mission, therefore, will be able to encourage and support institutions which are important to the shelter delivery system, while requiring them to operate in efficiently and on a competitive basis.

### 3. Interest Rates

The interest rate of 13% is compatible with the overall cost of resources and the level of inflation in Guatemala. The level of 15% interest authorized by the Central Bank was discussed extensively with GOG officials; it was concluded that the 15% level was not feasible at this time since its use would jeopardize the achievement of the program's objectives.

### 4. Upgrading Projects

This activity has been excluded from the program to allow for concentrated effort with the private sector in producing new shelter solutions. Upgrading efforts would involve the development of new systems and operational procedures while the program is purposely designed to work under the normal lending operations of the participating institutions. The fact that the program is reaching an entirely new target population, with solutions which reach as low as the 10th percentile, represents an extraordinarily innovative step.

### 5. Project Management

A PSC long-term advisor will work with the Mission in providing ongoing management and overall support to the program, with support from the Regional Housing Office and short-term technical assistance contractors.

### 6. Environmental Concerns:

There were five environmental concerns expressed in the IEE. They were site selection criteria, field construction practices, policies and standards governing the application of existing environmental laws, the operation and maintenance of site related water treatment facilities and internal budgetary coordination that will better integrate the provision of shelter with community services and facilities. Substantial technical assistance will be provided to assist FHA to develop site selection criteria and site preparation guidelines to better address these environmental concerns. The Housing Standards and Environment Committee to be established to deal with the remaining concerns supported by technical assistance. Of the five concerns, the most difficult to achieve will be coordinating the budget process of different ministries and municipalities with housing development. Nevertheless, it is expected that the urban planning study for Guatemala City financed by the GOG and CABEI and the \$30 million IDB/GOG water systems project will begin to directly address these concerns.

### E. Recommendation

That an authorization of \$10 million in HG funds be granted in FY 1982.

## II. DETAILED BACKGROUND AND PROGRAM DESCRIPTION

### A. Shelter Needs in Guatemala

Guatemala's population is increasing at the relatively high rate of 2.9% annually. It is estimated to increase from 7.3 million in 1980 to 12.7 million by 2000 assuming constant growth. This represents an absolute increase of 73% in just 20 years. Due to poor living conditions and severely limited economic opportunities in the countryside, the urban population is expanding at a rate higher than that of the rural areas. In 1950, 25% of the country's population lived in urban areas. By 1980, this had increased to 40%. By the year 2000 the population is expected to be roughly evenly divided between rural and urban areas. Due to limited financial resources for capital development programs and to the limited administrative resources of the public sector, particularly outside of the capital, the demands for urban shelter and services of the rapidly expanding population cannot be accommodated adequately. Nor has the production of minimum standard urban shelter by both the public and private sectors come even close to satisfying this rapid urban population growth.

According to the GOG's National Housing Plan 1979-2000, the accumulated backlog of substandard units was estimated at 560,000 in 1979. In order to bring the existing backlog of substandard units up to minimum acceptable levels (secure tenure, access to water and sanitary services) by the end of this century, some 28,000 existing units a year must be upgraded. In addition, 52,000 new housing units must be built every year (21,000 urban, 31,000 rural) to accommodate the growing population. Thus, a combined total of 80,000 housing solutions a year would be required to meet these needs. Current production levels of the formal shelter finance and production system when compared to the need derived from new household formation in urban areas alone indicate that the number of substandard urban units may have grown by as much as 13,800 units in 1981. Of 21,800 housing units required, just 37%, or roughly 8,000 were actually provided.

Those not served, virtually all of whom are poor families, have had to resolve their needs through overcrowding of the existing housing stock or by squatting illegally. As a result of the shortfall in production, the homes of Guatemala's urban poor are almost all substandard and by and large are seriously underserviced. Countrywide in 1979, in non-metropolitan urban areas, just 31.7% of all households had individual piped water connections, while 44% had such connections in the metropolitan area.

In the central cores of the metropolitan area and secondary cities, the poor are severely crowded into houses which were once occupied by a single middle or upper-income family and which now have been sub-divided to accommodate several low-income families. In these inner-city tenements, called "palomares", one room per family is common. Sanitary facilities are usually shared by several families. The poor families live as renters; but it is not uncommon for the owner to live in the unit as well. The supply of "palomares" in Guatemala City has been insufficient to match a demand

exacerbated by the 60,000 low income families in the metropolitan area whose homes were destroyed by the 1976 earthquake. (Previously, "palomares" served as temporary housing for new immigrants, with a high turnover. Subsequent to the earthquake, the acute housing scarcity stemmed mobility and kept the booming houses at a capacity point.) As a result, squatter areas have sprouted up on marginal land on the outskirts of the city. The houses in these areas are usually constructed of scrap materials. Water supply is available at best through a community tap. Sewer connections and interior sanitary facilities are virtually non-existent. Even farther out, on the urban fringe, families usually live in completely unserved semi-rural spontaneous settlements. In total, in the metropolitan area, over two-thirds of the population lives in informally built shelter. That is, shelter not built or financed by the existing housing finance or construction institutions. The overall picture of housing for the poor is bleak and threatens to deteriorate because of deficiencies in current institutional capacity to produce shelter and lack of resources to do so.

In the period 1976-80, a total of \$260 million was invested by both the private and public sectors in housing construction, including repairs, expansions, and new construction. However, from its peak in 1976 as a result of emergency earthquake relief efforts, investment in shelter has steadily declined and all \$153 million in reconstruction funds made available through various international and humanitarian organizations and foreign governments is now exhausted. A revealing statistic is the extremely low production level of the private sector; of the 28,000 units produced over the three-year period 1979-81, almost 85% was done by the public sector housing organizations. The level of effort by the private sector declined from 18.9% of total formal sector housing production in 1979 to 11.6% in 1981. In addition to low levels of production, the private sector has concentrated its efforts on middle and higher income housing solutions, leaving lower income housing to public sector institutions.

#### B. GOG Response

The GOG published in December 1979, a National Development Plan (Plan Nacional de Desarrollo) for the period 1979-82. One of the component parts of the plan focuses specifically on the housing sector. The plan acknowledges the importance of improved shelter to better overall living conditions and recognizes the potential benefits of a large scale housing program to the depressed construction industry. It also views a substantially increased housing program as an integral part of more general efforts to redistribute resources more equitably throughout the country.

The plan identifies a number of objectives which the GOG has set for the housing sector. Key among these objectives is the encouragement of both the public and private sectors to finance a variety of housing solutions for different income groups and to emphasize the production of shelter solutions for low income groups. Another important objective of the plan is the preservation of the existing housing inventory and where feasible the renovation of deteriorating areas in some of the central cities. This might

include improvements to the physical infrastructure as well as to the shelter units themselves. A third major objective is the construction of urban infrastructure sufficient to provide a minimal level of service to a major segment of the urban population. Finally, the GOG hopes to achieve a major improvement in the coordination of various programs affecting overall living conditions, gathering activities together under the rubric of a coherent urban development policy. Related to this effort will be an examination of current legal and financial practices utilized in the housing sector and the development of appropriate recommendations for increasing their effectiveness.

The proposed HG program will address a number of issues which the GOG feels are important, and will not conflict with any of the major objectives the Government has identified in the plan. The types of solutions proposed will serve lower income families. It will contribute to the Government's efforts to disperse investments outside the capital. Finally, the program directly supports GOG efforts to involve the private sector more deeply in the production of more affordable units.

In July 1982, the new government issued its Short-Term Economic Policy which stresses that it is a policy to correct, in a realistic context, current economic disequilibrium as a basis for developing more macro-solutions that deal with larger structural problems in the economy. The policy called for increased taxes. It called for reduced public expenditures without affecting those activities oriented to increasing production, satisfying basic needs of the population, maintaining employment and eliminating violence. Under its chapter on reactivating the economy, the policy clearly stated the GOG's intention to take measures that will resolve the housing deficit and the lack of employment. Large scale housing programs would be undertaken and designed and financed in a manner that is compatible with the capacities of those social groups most requiring shelter. Under the section dealing with attention to social sectors, the policy paper indicates that the GOG will review its urban and rural housing policy to satisfy the deficit. The policy concludes, with a statement that satisfactory solutions to Guatemala's problems will be achieved through a combined public, private effort.

### C. AID's Strategy

AID's strategy in Guatemala is currently being reassessed in terms of its geographic targeting toward the Guatemalan Highlands. The basic tenets of that strategy remain essentially the same. They are as follows: (a) reverse the economic deterioration currently affecting Guatemala; (b) expand the production base of the poor; (c) increase efficiency in the utilization of available resources; (d) increase access of the poor to basic social services; (e) incorporate the private sector into the development effort; and, (f) assist the GOG and private sector in building institutions capable of planning and implementing developmental programs.

Among various options, AID intends to favor projects which provide quickly developed employment opportunities, which are small-scale and respond to perceived community needs, and which increase the involvement of the private sector.

AID specifically views Housing Guaranty resources as complementing other programs directed toward assisting the poor. The need to involve the private sector in the provision of low-cost housing is so acute, the program as a whole will maintain some flexibility with regard to the geographic coverage of production to encourage the private sector to participate.

This proposed pilot program conforms to the overall AID strategy being developed in Guatemala and to the Mission's intentions for the HG program. AID's emphasis on involvement of the private sector is directly supported by the proposed program. The program also reflects the priority the Mission attaches to activities which deal with improving the quality of life of the poor and which address expressed community social needs. The program also reflects the priority the Mission attaches to projects which offer employment opportunities to the relatively unskilled. Finally, this program is designed to move quickly -- the emphasis on private sector participation and avoidance of bureaucratic administration should assure that the pace of construction be as rapid as possible.

Private construction firms and financial institutions in Guatemala have never attempted to produce and sell basic shelter units. Traditionally, they have directed their resources toward higher cost housing for the middle and upper classes. However, the sharp downward trend in construction activity due to deteriorating economic conditions as reflected by the 40% reduction experienced in 1980 over 1979 levels provides a real opportunity to redirect the focus of the private sector toward the massive, basic shelter market. The AID-financed studies of the shelter sector have been successful in focusing attention on an existing delivery process that has operated successfully to expand production of high-cost units and has demonstrated how it can be reoriented to serve the AID target group. Now AID (HG) and GOG financing from this program can become the catalyst to begin the process of reorienting the productive capacity of the private sector.

As the first bilateral HG for Guatemala in more than 15 years, this program should be used as a starting point in an on-going dialogue with the GOG on broad housing policy and issues. Some issues will arise specifically from the program, and mechanisms for coordinating and monitoring the program will have wider application. In addition, analyses of key elements of the shelter delivery system will be carried out, e.g. construction standards, the role of municipalities, and the shelter finance system. The presence of a full time housing advisor in Guatemala, as well as short-term technical assistance, will serve to stimulate and focus the dialogue with the GOG.

#### D. Shelter Programs of Other Donors

The substantial international humanitarian assistance for funds and building materials following the 1976 earthquake has by and large now been exhausted. The only international donor now actively supporting the shelter sector is the World Bank. A \$40 million program is being financed jointly by the Bank and the GOG to build about 10,000 low-cost housing solutions

including a small portion of serviced lots, to provide building materials loans in the metropolitan area, and to extend construction loans to ten other urban areas has now been underway for about five years. The loan is being administered by BANVI. The intended beneficiaries are in the lowest income quartile. Though the project was well behind schedule and though the bank and AID have experienced similar problems in BANVI's administration of the project, the housing solutions are now nearing completion. The World Bank has no plans at the moment for a follow-on project in Guatemala, nor has any other information become available suggesting new initiatives on the part of other international donors. The other projects underway are the previously mentioned CABEI/BANVI activities and the above-mentioned IDB project.

## E. Detailed Program Description

### 1. Goal

The goal of the program is to improve the living conditions of the urban poor.

### 2. Purpose

The purpose of this program is to support the GOG and the private sector in testing whether basic shelter can be produced which is affordable by families with incomes below the median by broadening the existing private financial and production system.

### 3. Elements Supporting Purpose

The basic elements of the proposed program are:

#### a. Expanding the institutional base for the production of shelter

This component will be tested in the following ways: (a) the private sector will be providing and financing basic, low-cost shelter at market interest rates; (b) FHA will extend mortgage insurance to low-cost units; and, (c) units will be produced in secondary cities as well as Guatemala City.

#### b. Production of Low-Cost Solutions

The typology of solutions to be built will range from a serviced lot with sanitary core to a 50m<sup>2</sup> core unit. Similar solutions were previously produced on concessional terms by public institutions but are new to the private sector. However, given that this project will be produced within the FHA system, thus guaranteeing the developer his takeouts on completion and sale, the developers expressed no hesitation at risking their own investments during the construction stage. The types and quantities of solutions to be financed are as follows:

<u>Solution Typology</u>	<u>Approx. Mortgage* (90% financed)</u>	<u>Est. No. of Solutions</u>	<u>Affordability</u>
Urbanized Lots of 90m <sup>2</sup> and Sanitary Core	<u>Met.Area/ Interior</u> \$4,170-\$2,560	1,181	<u>Met.Area/ Interior</u> 10th-5th
Urbanized Lot and a Basic Unit of 30m <sup>2</sup>	\$6,240-\$4,785	1,182	25th-20th
Urbanized Lot and a Basic Unit of 50m <sup>2</sup>	\$8,155-\$6,700	1,181	40th-35th
TOTALS/AVERAGES	\$6,188-\$4,682	3,544	

\*13% interest, 20 year term.

Three types of solutions have been structured to provide a range of opportunity for families below the median. Of the \$20 million in resources, allocations have been made in such a way as to permit equal numbers of solution types to be developed. This approach takes into consideration the fact that private builders and promoters have had little direct experience with these types of solutions and will have to adjust their past promotion and construction activities to this program. The solution typology has been developed so that it is within the reach of the target group. The approximate mortgage figures reflect the shelter cost differences between the Metropolitan Area of Guatemala City and other urban areas. The affordability column shows the relationship of these estimated mortgage amounts to the income levels in the two areas.

#### F. Inputs

The total resources of AID and the GOG will be directed at achieving the planned outputs and addressing the problems which have been identified.

1. HG resources amounting to \$10 million will be loaned to the Ministry of Finance. The Bank of Guatemala will establish a line of credit of an equivalent amount for the low-cost housing trust fund. These resources will be channeled to finance long-term mortgages for low-cost housing. Resources of the trust fund will be tied to local costs of resources.

2. GOG counterpart resources amounting to Q.10 million will be used according to the same criteria established for HG resources.

3. Beneficiaries will provide 10% down payments amounting to Q2,000,000. This figure reflects a total investment in housing of Q22,000,000.

4. Technical assistance resources amounting to \$300,000 in grant funding, \$100,000 in FY 1983 and \$200,000 in FY 1984, will be provided to support program implementation in the following manner:

a. A long-term advisor under a personal services contract for 18 months will support and monitor project implementation, coordinate short-term technical assistance and provide follow-up on key policy discussions expected to take place as part of this pilot effort.

b. Short-term technical assistance on the following:

(1) Housing, urbanization and infrastructure standards and environmental guidelines to be used by FHA in approving low-cost housing to be financed and developed. Standards will be developed that relate to the paying capacity of the target group. Guidelines will be oriented to site selection and site preparation criteria as well as other environmental issues related to water quality, application of environmental laws, and coordination of community facilities with shelter projects. Approximately six months of assistance will be provided directly to FHA and the Housing Standards and Environmental Committee.

(2) Mobilization of savings for this assistance will take into consideration liquidity in the banking system, ways to mobilize resources through savings and financial instruments and developing marketing strategies to generate resources. Approximately six months will be provided.

(3) Developing techniques and criteria for credit to the target group. This assistance of approximately two months will be directed primarily at the FHA and commercial banks to help them develop criteria and loan application review procedures. This assistance will also help train staff in the application of the same.

G. Implementation Arrangements

Ministry of Finance  
(MOF)

- Contracts \$10 million  
HG loan.

- Issues GOG guarantee.

- Authorizes Q10 million  
counterpart funding.

- Participates in Housing Policy  
Committee.

Bank of Guatemala  
(BOG)

- Presents disbursement  
request for MOF on basis of  
mortgages generated.

- Reserves funds for program and disburses  
resources based upon requests by approved  
institutions and mortgages generated.

FHA

- Participates in Housing Policy Committee.
- Establishes guidelines for program in terms of solution typology, design standards, project location, etc.
- Approves projects submitted by approved institutions and issues commitment of insurability.
- Analyzes and approves credit applications of potential clients for solutions prior to issuing insurance.
- Insures portfolio against non-payment by individual clients.
- Qualifies builders.
- Inspects projects during and after construction.
- Organizes Housing Standards and Environmental Committee.
- Acts as Secretary of Housing Policy Committee.

- Approved FHA  
Entities:

- Receive projects from promoters.
- Present projects to FHA for insurance commitment.
- Provide interim financing.
- Process mortgages for target group.
- Administer debt service.
- Receive mortgage certificates from promoters which are held by the bank or discounted by the BOG.
- Conduct credit analyses of beneficiaries.

Promoters/Contractors

- Identify projects.
- Obtain interim and long-term financing.
- Execute projects.

-Organize markets and sell units.

-Discount mortgage certificates with approved institutions.

The Housing Policy Committee will consist of high-level MOF, BOG, FHA, BANVI, and SGCNPE officials. This group will evaluate the program's operation, study alternative institutional and financial vehicles to generate future housing finance, and develop a strategy to support the GOG in its efforts to sustain production.

A Housing Standards and Environmental Committee, chaired by FHA, will address housing standards and environmental issues. Emphasis will be placed upon regulations and standards which affect the insuring of shelter by FHA and the ability of the private sector to finance and produce shelter for the target group.

#### H. Beneficiaries

The beneficiaries of the program are families whose incomes are below the median level for urban households. The resources will be allocated for financing of new shelter solutions. A range of minimum shelter solutions were derived to permit families with incomes that fall between the 5th to the 40th percentiles to participate in this program. Program beneficiaries will make a down payment of 10% and amortize their mortgages over 20 years. Closing cost and related fees and commissions are factored into the mortgage loan as is the practice in Guatemala.

The program was designed to ensure affordability in two ways. First, paying capacity of the beneficiaries was estimated to be 25% of monthly incomes while FHA criteria permit up to 33%. Thus, should a family opt to allocate 33% of its monthly income for housing, it would fall lower down the income scale. Secondly, the standards of the largest solution are within the paying capacities of families of the 40th percentile.

### III. TECHNICAL FEASIBILITY

#### A. Methodology Used to Determine Program Feasibility

The methodology applied in the analysis of technical feasibility for the proposed program consists of four (4) basic steps which are as follows:

##### 1. First

The maximum payment capacity at various income percentiles below the median income was determined to assess the maximum shelter solution costs affordable to the target population (See Table III-1).

##### 2. Second

Cost analyses were made of various minimum shelter solutions. These solution types and corresponding sales prices are set forth in Table III-2.

##### 3. Third

A comparative evaluation was made of the estimated payment capacity of the different income percentile groups and the affordability (mortgage payment) of the shelter solutions (Table III-3).

##### 4. Fourth

The financial resources of the program were allocated to produce the different solution types as shown in Table III-4.

Monthly family incomes figures were derived so that they fell at the mid-point of each decile group below the median level (45th, 35th, 25th, etc.). Based upon these figures, it was assumed that 25% monthly earnings would be devoted to satisfying basic shelter needs (estimated mortgage payment capacity). However, FHA regulations permit payments to be 33% of monthly family income. The results of this analysis are shown in Table III-1 below:

TABLE III-1

MONTHLY FAMILY INCOME AND ESTIMATED MORTGAGE PAYMENT

BY INCOME PERCENTILE BELOW THE MEDIAN

<u>Income Percentile</u>	<u>Metropolitan Area Guatemala</u>		<u>Interior Urban Centers</u>	
	<u>Monthly Family Income</u>	<u>Estimated Mortgage Payment Capacity</u>	<u>Monthly Family Income</u>	<u>Estimated Mortgage Payment Capacity</u>
50th	\$450	\$113	\$400	\$101
45th	415	100	375	94
35th	350	88	320	81
25th	290	73	275	69
15th	230	58	200	50

TABLE III-2

ILLUSTRATIVE SHELTER SOLUTIONS AND ESTIMATED SALES COST

<u>RANGE OF SHELTER SOLUTIONS</u>	<u>SALES COST</u>	
	<u>Metro Area Guatemala</u>	<u>Interior Urban Centers</u>
<u>LEVEL I</u> : Urbanized lot (90m <sup>2</sup> ) with sanitary core	\$4,270	\$2,660
<u>LEVEL II</u> : Urbanized lot with 30m <sup>2</sup> of construction area (sanitary core, kitchen, and multi-purpose space)	\$6,390	\$4,900
<u>LEVEL III</u> : Urbanized lot with 50m <sup>2</sup> of construction area (sanitary core, kitchen, and two bedrooms)	\$8,350	\$6,860

The shelter solutions set forth above are only illustrative examples of the probable minimum and near upper limit of the prototypes of housing to be financed under this program. The basic premise is to encourage a variety of progressive shelter solutions to be built to match the capacity-to-pay of the beneficiary income groups below the 45th income percentile. The range of shelter options is described in further detail under Section III.B.

TABLE III-3

<u>RANGE OF SHELTER SOLUTIONS</u>	<u>AMOUNT OF MORTGAGE FINANCED<sup>1/</sup></u>		<u>MONTHLY PAYMENT</u>		<u>AFFORDABILITY BY INCOME PERCENTILE</u>	
	<u>Metro/Interior</u>	<u>Metro/Interior</u>	<u>Metro/Interior</u>	<u>Metro/Interior</u>	<u>Metro/Interior</u>	<u>Metro/Interior</u>
<u>LEVEL I</u>						
Urbanized lot (90m <sup>2</sup> ) with sanitary core	\$4,170	\$2,560	\$49	\$30	10th	5th
<u>LEVEL II</u>						
Urbanized lot with 30m <sup>2</sup> of construction area	\$6,240	\$4,785	\$74	\$56	25th	20th
<u>LEVEL III</u>						
Urbanized lot with 50m <sup>2</sup> of construction area	\$8,155	\$6,700	\$97	\$79	40th	35th

- 1/ Includes closing costs, legal fees, life insurance amounting to 8.5% and downpayment of 10%; 90% will be financed.
- 2/ Repayment of mortgage amount on a monthly based upon a recovery period of 20 years at 13% interest.
- 3/ The affordability of the distinct shelter solutions assumes 25% of family income for housing.

TABLE III-4

DISTRIBUTION OF SOLUTIONS

<u>SHELTER SOLUTIONS</u>	<u>ANTICIPATED PRODUCTION OF SHELTER SOLUTIONS</u>	
	<u>(Number)</u>	<u>(Percent)</u>
<u>LEVEL I</u>		
Urbanized lot (90m <sup>2</sup> ) with sanitary core	1,181	33%
<u>LEVEL II</u>		
Urbanized lot with 30m <sup>2</sup> of construction area	1,182	34%
<u>LEVEL III</u>		
Urbanized lot with 50m <sup>2</sup> of construction area	1,181	33%
<u>TOTAL</u>	<u>3,544</u>	<u>100%</u>

The number of shelter solutions to be financed with the \$20 million in the program is estimated to be roughly 3,550. Of this total number, the solution distribution among Levels I, II and III is anticipated to be approximately equal. The geographic location of these solutions is projected to be roughly 70% in the metropolitan area of Guatemala City and 30% in interior urban centers.

## B. Description of Shelter Solution Typology

### 1. Level I: Urbanized Lot with Sanitary Core

The lots will be fully serviced with water, sewerage, storm drainage, street lighting and pedestrian or vehicular access. The sanitary core is a 3m<sup>2</sup> structure consisting of toilet, shower and laundry washing facility placed on a 5m<sup>2</sup> concrete slab. The typical lot size will be 90m<sup>2</sup>. Lot size may be reduced to possibly 72m<sup>2</sup> or 80m<sup>2</sup>. Outside the Metropolitan Area of Guatemala where land costs are lower, slightly larger lot sizes may be preferred and developed to reflect differences in personal preference and climate conditions. (See Annex III-C)

Typical urbanization improvements will include curb, gutter and sidewalks along streets. Interior pedestrian pathways will be constructed with a sidewalk and a single open storm drainage ditch (paved).

This shelter solution provides access by the lowest income percentile among the target population. It is designed to offer families with incomes between the 5th and 10th deciles (depending on location) private ownership of land with a minimal but acceptable level of basic services. It is anticipated that initial occupancy of the urbanized lot will be achieved by utilizing provisional shelter materials (wood slabs, zinc sheets, plywood panels, etc.). As savings are accrued by the beneficiary family, incremental improvements can be built. The coordinated development of these improvements will ensure optimum utilization of the lot size in meeting each family's shelter needs.

The cost of the urbanized lot with sanitary core is based upon prevailing construction cost figures (September 1982) and prevailing design and urbanization standards, with the exception of lot size. If no changes were to be made in any of the other standards, the projects would still be affordable to the lowest income groups. Lot size is the single most critical cost factor in designing affordable solutions. In Guatemala City, the regulations on the books require 160m<sup>2</sup> lots as a minimum, but exceptions are being made with increasing frequency (projects have been approved which have lot sizes in the range of 90-120m<sup>2</sup>). Also, standards in other municipalities are more flexible than those in the capital and do not represent a problem. Further reductions in urbanization costs in Guatemala City are expected as a result of GOG's inter-institutional efforts to establish lower subdivision and construction cost standards.

### 2. Level II: Urbanized Lot with 30m<sup>2</sup> of Construction Area

This level shelter solution offers the same basic provisions as Level I and in addition incorporates 30m<sup>2</sup> of covered living space. This area contains one multi-purpose room which can be partitioned for sleeping and living use, a small kitchen as well as the sanitary core, consisting of bathroom, shower, laundry washing facilities (see Annex III-C). The design of the Level II solution allows for self-help expansion.

3. Level III: Urbanized Lot with 50m<sup>2</sup> of Construction Area

This level of shelter solution is the highest cost option to be financed under the proposed program. It is the same as Level II's urbanized lot and core unit but adds on an additional 20m<sup>2</sup> of living space.

C. Development Costs and Sales Price Analysis

1. Housing Development Costs

The major direct cost component in the preparation of a housing project area: (1) raw land costs, (2) urbanization (infrastructure) costs, (3) construction costs, (4) other indirect costs including design and supervision, interim financing, sales, profits, administration and contingencies, and (5) urban service connections. Each of these cost components is described below. Indirect costs cumulatively represent the largest expense in developing a house. Development costs are discussed in terms of area, the Metropolitan Area of Guatemala City and other interior urban areas.

(a) Raw and Not Usable Land Costs:

The cost of land is influenced by numerous factors including physical site conditions, geographical constraints, accessibility to basic services and vehicular access as well as prevailing political and socio-economic conditions in the country. A broad range in land acquisition costs were found both in and outside of Guatemala City.

In general, net land costs average from \$3 per square meter in interior urban areas to \$10 per square meter in the Metropolitan Area of Guatemala City. These cost figures are approximately double raw figures due to the various land use and urbanization regulations and expected loss of some of the gross site to topographic characteristics.

As has been noted, exceptions have been made to lot size requirements and projects with smaller lot sizes are being approved with increasing frequency. Similarly, the land dedication requirement - 10% of gross land area for reforestation and 10% for open space as well as those pertaining to net usable area, particularly 5% for schools and 5% for community facilities, will also be reviewed and revised in the context of their actual need and probability of use for those purposes.

(b) Urbanization (Infrastructure) Costs

The average costs of site preparation and urbanization was found to be roughly \$15 per sq. meter of lot area in the Guatemala City area. These costs include items such as clearing of the site, grading and earth movement, boundary survey, staking of lots and public rights-of-way, basic services (water, sewerage, storm drainage) side walks, street lighting, and select material compaction of vehicular streets. Costs ranged from \$11-\$18

per sq. meter, depending on the use of particular construction materials and specifications, the need for on- and off-site infrastructure improvements (water distribution connections, storage tanks, and sewerage treatment plant) etc.

Costs of urbanization in other urban centers outside Guatemala City were found to be substantially reduced. Average per sq. meter costs in relationship to lot area were \$8. These lower costs are attributed primarily to the abundant supply of both skilled and unskilled labor at lower wages.

(c) Construction Costs

Using prevailing construction technology, the Guatemalan housing industry employs concrete block or brick walls, concrete slab at grade, corrugated zinc/asbestos roofs on wood or metal trusses and standard plumbing fixtures and electrical installations. The sq. meter cost of the constructed area averages approximately \$70. Some experimentation has occurred with various pre-fab systems in the production of wall panels made on-site or delivered from off-site plants. But high production costs, requirements of high volume operations, and quality control problems have diminished their use and public acceptability. Few plants are still in operation today.

(d) Other Indirect Costs

Additional costs considered in the technical analysis of the proposed shelter solutions were various indirect expenses. Design and supervision fees were estimated to be roughly 5% of direct costs. Contingencies were expected to be 10%. Sales costs were estimated at 5%. Construction financing was assumed to be 10% (assuming less than a full year construction period) and 10% was added as profit. The indirect costs were estimated to add approximately 40% to the above costs. Service connections were factored in separately.

The determination of the final estimated sales price of the proposed prototype shelter solutions is shown in Table III-2.

D. Assessment of the Delivery Capacity of the Housing Sector

1. Land Availability and Costs

In the metropolitan area of Guatemala City current construction of low-cost housing by BANVI and FENACОВI is occurring between a radius of 15 to 20 kilometers from the city center. According to the Guatemalan Chamber of Construction, land is available in this general area. Because of past rapid population growth and intensive reconstruction activities in the 1976-79 period following the earthquake, the most suitable "close-in" parcels of large land holdings have been developed or are being held for speculative purposes. However, smaller tracts of land are available. In summary, the primary areas

for expansion of low-cost housing projects are in the peripheral areas of Guatemala City, including the municipalities of Mixco, Villa Nueva, San Miguel Petapa, Villa Canales and Santa Catarina. The supply of land and its costs pose no major problems for project implementation in the Metropolitan Area of Guatemala City or in other urban areas throughout the country.

## 2. Basic Infrastructure Services and Utilities

The geographic location of the housing projects to be developed dictate the availability of potable water supply, centralized sewerage collection disposal, and electricity, and these urban services will vary with each municipality. Outside the Metropolitan Area of Guatemala City, the existing areas with available potable water and waste collection systems are limited. However, the National Institute of Municipal Development (INFOM) in November, 1982 will begin a \$30 million program to rehabilitate and expand water supply and sewerage collection/treatment systems to 17 cities. The GOG and BID will finance the project. It is expected to enhance development opportunities outside Guatemala City, possibly reduce site urbanization costs and possibly address some previously mentioned environmental concerns.

In areas where connections to existing municipal infrastructure systems do not exist, developers, using FHA standards, will be required to provide an independent on-site water supply and waste disposal systems. These will be financed as part of the project construction costs. The water supply system will include a shallow or deep well, depending on geological conditions, elevated tank and distribution lines. Commonly used waste disposal systems may be a septic tank or Imhoff tank and absorption pit. Land treatment is a preferred alternative to raw or treated waste discharge to nearby receiving streams.

The delivery of electricity by INDE may be somewhat slow to project sites but is normally readily available. Developers are required to pre-pay these expenses.

## 3. Construction Materials

With the exception of few bathroom and electrical fixtures (which are readily available from El Salvador or the United States), Guatemala will be able to provide all of the principal construction materials used in the traditional building industry. The existence of excess building capacity because of the depressed economy will mean that idled heavy construction equipment will be readily available without need for its importation. In summary, approximately 96-98% of all construction materials will be obtained locally.

## 4. Labor Supply

Technology used in the traditional building system for low-cost housing construction is simple. Skilled laborers are in abundant supply and readily found both in Guatemala City as well as secondary urban centers.

Current low production volumes in the housing sector (See Economic Section) ensure a ready supply of unskilled and skilled labors. Therefore, no significant problems are expected to adversely affect normal program implementation operations.

#### 5. Housing Contractors and Planning/Architectural Design Firms

Within the Guatemalan Chamber of Construction there are in excess of 50 specialized firms currently active in all phases of housing planning, design and construction industry. The majority are using traditional building technology in their housing projects. While the majority of their housing developments are oriented to the middle and upper income groups, there are no technical constraints which would obstruct them from entering and successfully carrying out low-cost housing construction. In addition, the experience gained by numerous building professionals through the project experience of BANVI and FENACОВI is directly applicable to this shelter program. (FENACОВI may act as a promoter in this program and BANVI is an approved institution.)

#### 6. Adaptability of Existing Plans and/or Projects in the Housing Delivery Pipeline

Discussion with members of the Guatemalan Chamber of Construction and private banks involved in the financing of housing projects revealed that there is a definite interest by the housing sector in participating immediately in the shelter program through possibly modifying some current projects in the planning/feasibility stage of development and/or amending already approved projects by FHA, municipal authorities and private financing institutions. While the majority of projects in the pipeline are geared to the middle and upper income classes, a number of projects in the \$10-13,000 unit cost range could be adjusted to be eligible for this program.

#### E. Environmental Concerns

On the basis of the Initial Environmental Examination and the discussion below, the program has been given a negative determination requiring no further environmental review. The initial Environmental Examination identified five critical areas of concern. They were: 1) Deficiencies in site selection criteria; 2) lack of defined environmental design criteria and related field practices; 3) lack of policies and standards governing application of existing environmental laws; 4) operation and maintenance of on-site water and sewerage treatment facilities; and 5) inter-institutional cooperation and coordination in planning and financial programming of community services. The threshold determination recommended that special environmental design standards be incorporated in the TA. The determination recognized that proceeding with the project given the housing deficit and its adverse effect on the lives and existing physical quality of the urban environment would outweigh resolving critical environmental concerns mentioned above. It was hoped that the leverage of \$40 million program would permit these concerns to be addressed.

The pilot program as designed will not have the leverage that a larger level of resources would have had. However, substantial assistance has been programmed to address environmental concerns and a forum is being established with FHA, the municipalities, the Ministry of Public Works and contractors to address these concerns. The most difficult to address in this project are maintenance of on-site water and sewerage treatment facilities and the inter-institutional planning and programming of services related to shelter. On the former point this would be discussed with the municipality which is responsible for the water system and should be addressed directly in the INFOM/IDB water sewer project. The latter point should be addressed under the CABEI financed Guatemala City Metropolitan Area Analysis and Urban Plan which is about to be initiated. Growth policies and financial programming are expected to be dealt with in that effort.

IV. SOCIAL SOUNDNESS ANALYSIS

A. The Target Population: Income and Employment

1. The Urban Median Income and Estimating Capacity to Pay

The economy of Guatemala has been extraordinarily stable over the past 30 years. In recent years, inflation rose from levels of about 5% per year to over 11% per year, but has declined again to about 9%. Incomes also have been relatively stable, rising much more slowly than inflation or GDP.

The 1981 income figures presented in the PID were compared with the 1981 data from the Direccion General de Estadistica and were found to be only slightly different. Therefore, the PID figures have been maintained, without inflation adjustments since there is general agreement that in the period 1981-1982 salaries have remained unchanged. If anything, overall income may be on the decline since unemployment is said to be increasing.

TABLE IV-I

Est. Monthly Household Income and Payment Capacity  
1982

<u>%ile</u>	<u>Met.Area</u>		<u>Total Urban</u>	
	<u>Income</u>	<u>(25-30%)</u>	<u>Income</u>	<u>(25-30%)</u>
45th	Q.415	Q.104-125	Q.375	Q. 94-112
35th	350	87-105	325	81- 97
25th	290	72- 87	275	69- 82
15th	230	57- 69	200	50- 60

The Total Urban figures are weighted toward larger urban centers in the interior since projects constructed outside the Metropolitan Area are likely to be in cities like Escuintla, rather than small towns. Moreover, census data has distortions since some areas are counted as urban but their functions and employment structures are predominantly oriented toward mining and agricultural pursuits. The income distribution for the Metropolitan Area is treated separately since fully two-thirds of the demand is concentrated there. Also, that demand is growing at a faster rate than in other cities due to migration combined with natural population growth.

In terms of estimating capacity to pay, FHA traditionally has used 33% of household income as a guideline for approving mortgages for guarantees, taking into account net income of all household members. In some exceptional cases, it accepts even higher proportions of income if families can demonstrate that all other expenses are covered with an adequate margin. Actually, FHA's selection criteria are more liberal in this respect than some public sector institutions. BANVI, for instance, estimates that low-income families have a much lower capacity to pay than actual data would indicate. First, while the incomes of both spouses are taken into account, only 20% of the income of other working members is considered as part of household income. Also, BANVI uses a complex formula which eliminates large numbers of potential beneficiaries and forces others who are both willing and able to pay proportionately higher amounts to a smaller unit.

In contrast, data demonstrate that low-income families, in fact, have begun to pay proportionately higher amounts of income for housing as scarcity increases rents and mortgages. As early as 1973, low-income families paid an average of 22-25% of incomes on housing. Demand pressures have substantially increased costs. Various studies show that many low-income families pay close to 40% of income in housing related costs and a smaller group pays even a larger share. While this is not interpreted to mean that these families should pay so much, it does strengthen arguments in favor of higher limits so that families willing to pay more are eligible for projects.

## 2. Employment Characteristics

Low-income families are not homogenous in either employment characteristics or income levels. Very distinct sub-groups make up the population below the median income. Yet, when planners speak about low-income families in Guatemala, it becomes clear that there is a widespread belief that they are predominantly informal sector workers, i.e. under-employed in minor service jobs. The available data do not support this belief. In fact, the data indicate that about the same proportion of low-income workers are salaried as found in the population as a whole. Census data from 1973 demonstrated that 63% of the heads of households in poor neighborhoods were salaried, a pattern which was repeated in the 1981 data of the Direcccion

General de Estadística.<sup>1/</sup> In the BANVI-IBRD program, about 60% of the participants are salaried workers and 40% self-employed. For the Metropolitan Area as a whole, 61% of the primary household earners are salaried. This is not surprising since non-salaried workers include many professionals and businessmen, as well as street vendors and other occupations which are normally associated with the informal sector.

FHA has an operable system for qualifying non-salaried workers which involves invoices, financial statements and other secondary sources for income verification. While the process takes some additional time, it does not present insuperable problems. If a large segment of the new applications were to require income verification, the administrative capacity would be under even greater pressure. It is not expected that the program will significantly affect the volume of loan approvals in any given period, but a greater number of non-salaried applicants may result from the program. Measures are being taken to prepare more staff for handling these kinds of cases, although it is highly unlikely that this group will be the majority of the HG beneficiaries.

It should be noted that salaried workers are not necessarily the least risk group. Unemployment is rising for workers at all income levels. Official figures are a few years out of date, but estimates are alarming. Preliminary figures for 1981 placed open unemployment at 13.1% and projections for 1982 and 1983 are 15.3% and 17% respectively. Underemployment, which is widespread and particularly acute in rural areas, makes the general employment situation even more difficult.

### 3. The Participation of Women - Income and Employment Considerations

In many countries, inequalities in income and employment opportunities prevent female household heads from participating in housing projects in proportion to their numbers in the population. (There are no specific legal issues in Guatemala which would inhibit their participation.) An estimated 18% to 20% of all low-income households in the Metropolitan Area are headed by women; the incidence is less in other urban areas.

Surprisingly, in Guatemala income levels of male and female household heads are roughly equal. Women are not overrepresented in the lowest income groups in proportion to their numbers in the workforce. One disadvantage faced by female-headed households, however, is fewer working members per household. (Various sources estimate that low income households have between 2-3 workers, while female headed households often have only one worker.)

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<sup>1/</sup> The industrial sector employs the largest group of workers (25%). The construction sector is one of the next largest segments (18%). Since the HG program will stimulate a progressive construction strategy, workers in low-income communities may benefit as beneficiaries begin to expand and improve their units.

Sources of income, on the other hand, are very different. While men represent 70% of all salaried household heads, most female heads receive income from less steady sources. Of the MAG households that rely on transfer payments as the primary income source, 64% are headed by females. (Ref. 1981 data set of Direccion General de Estadistica.)

In conclusion, women should be eligible for various types of solutions based on income criteria, although they will probably have less flexibility since total income may be lower if there are fewer working members. However, they are likely to have more difficulty than men in the approval process since extra steps must be taken to analyze and verify non-salaried income. The action taken by FHA to facilitate these steps will be particularly beneficial to women.

#### D. Demand Study

##### 1. Survey Background

In August 1982, a survey was conducted in four cities to determine the interest of low income families in the types of solutions proposed under this program.

The survey was conducted in the capital, Guatemala City, in Quetzaltenango and Escuintla, the two next largest cities, and in Jutiapa, an example of a provincial town. Samples in both the capital and secondary cities were chosen at random in the areas where it was anticipated that program beneficiaries were most likely to live. Since prior research had defined discrete types of low income neighborhoods and it was felt that responses would differ depending upon the area, the sample was stratified in four basic types of neighborhoods; tugurios, palomares, deteriorated central areas and deteriorated peripheral areas. A listing of all neighborhoods falling into these categories was compiled and four neighborhoods of each type were selected at random. Within the neighborhoods, households were selected randomly. It is important to note that the sample is not a random sample of the low income population and the data do not allow for generalization to the total population.

Further, the sample was not stratified by income. Indeed, the results show that the respondents to the survey tend to concentrate heavily in the lowest ranges of the income distribution scale, (60% fall at or below the 20th percentile). Thus, the responses to the demand questions need to be interpreted carefully as they come predominantly from a group which falls in a lower income bracket than many of the program beneficiaries.

In Guatemala City, a total of 840 families were interviewed with an equal number (210) selected from tugurios, "palomares", deteriorated homes in the center city and deteriorated homes on the periphery of the city. In the secondary cities, a total of 457 households was interviewed; 154 in Jutiapa, 133 in Escuintla, and 145 in Quetzaltenango. In this analysis a total of 1,089 cases are used instead of the 1,518 actually interviewed since some data could not be incorporated due to errors or lack of response.

During the interview, basic data were collected on selected socio-economic characteristics of the occupants, current housing conditions, including the existence of improvements to the home, and their response to the three proposed solutions: a serviced lot, core unit and complete house. Families were also queried on their interest in a home improvement loan program.

Although serviced lots and core units have been built in Guatemala, a drawing of each solution was shown by the interviewer in order to ensure a uniform frame of reference from which respondents could answer questions.

The preliminary analysis of key variables from the report is provided below. The final report of the study will be available in October, 1982.

2. General Summary

TABLE IV-2

Income Distribution of Households  
Surveyed in Guatemala City

<u>Household Income</u> (Quetzales per month)	<u>Number of</u> <u>Cases</u>	<u>Percent</u>	<u>Metropolitan Urban</u> <u>Percentile</u>
0-150	205	29%	0-4
151-250	241	32%	4-20
250-300	79	11%	20-30
300-350	47	6%	30-35
350-450	63	8%	35-40
450 or more	<u>113</u>	<u>15%</u>	50+
TOTAL	759	100%	

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TABLE IV-3

GUATEMALA CITY

AFFORDABILITY OF PROPOSED SOLUTIONS

IN GUATEMALA CITY

	<u>% Who Can Af-</u> <u>ford Urban-</u> <u>ized Lot</u>	<u>% Who can</u> <u>Afford</u> <u>Core Unit</u>	<u>% Who Can</u> <u>Afford</u> <u>Complete</u> <u>Housing</u>	<u>TOTAL</u>
<u>TOTAL POPU-</u> <u>LATION</u>	67	32	21	100
Tugurio	62	24	14	100
Palomar	68	29	18	100
Deteriorated Central Areas	80	52	39	100
Deteriorated Periphery	57	22	13	100

As anticipated, most residents of the areas surveyed fell below the median income in all cities. A far larger group than anticipated fell below the twentieth percentile (61% in Guatemala City and 63% in the secondary cities), the income of a majority of this group is below the projected income of the project beneficiaries.

Within Guatemala City, however, it is important to note that household incomes are much lower in the tugurios and peripheral areas of the city. Table IV-3 shows affordability by area and de facto income distribution.

While potential buyers live in all areas of the city, residents of the deteriorated downtown areas are more likely to have the income necessary to purchase a unit, followed by residents of palomares.

Percentage of Respondents Who Accepted  
Proposed Solutions in Guatemala City  
and Secondary Cities

	<u>Urbanized Lot</u>		<u>Core Unit</u>		<u>Complete House</u>	
	<u>Guate.</u>	<u>Sec. City</u>	<u>Guate.</u>	<u>Sec. City</u>	<u>Guate.</u>	<u>Sec. City</u>
<u>TOTAL POPULATION</u>	<u>47.0%</u>	<u>39.0%</u>	<u>45.0%</u>	<u>31.0%</u>	<u>28.0%</u>	<u>15.0%</u>
Palomar	51.0%	41.5%	54.0%	32.0%	17.0%	0.0%
Tugurio	48.0	33.0	35.0	17.0	31.0	18.0
Deteriorated Central Area	41.0	39.0	49.0	47.0	48.0	33.0
Periphery	49.0	42.5	43.0	29.0	17.0	15.0

### 3. Demand by City

The largest demand for all the units is found in Guatemala City, followed by Escuintla and Jutiapa. Demand is least in Quezaltenango.

Guatemala City is experiencing both growth from immigration as well as natural population growth. Housing construction for the low income population has not kept pace with this growth. This, combined with the fact that much of the housing stock destroyed by the earthquake has not been rebuilt, has created a large deficit.

Quezaltenango, the second largest city in the country, is experiencing out migration as a result of the current political situation in the area and has higher unemployment. Demand was not as high as in Escuintla which is, in contrast, a thriving, economically active city, and is potentially a strong market for the project solutions. Income is steady and higher than in the other two areas.

Jutiapa, like the majority of provincial capitals and towns, continues to be a semi-rural town where the land-use pattern is more rural than urban, thus the solutions were rejected as being inappropriate and too expensive.

### 4. Demand for the Specific Solutions

#### Urbanized Lot

The urbanized lot and core unit were found to be in demand by a large percentage of all groups in the capital. This is not surprising because they are the lowest cost solutions and fit the paying capacity of the relatively low income groups of the sample population. The largest potential market, for the lot appears to be among the families living in the extremely crowded living quarters of the "palomares" in Guatemala City. They are among the most motivated to move because of the very high densities of those areas. This group is the most likely to be actively looking for a new house (59%).

The overwhelming majority of the residents in "palomares" are renters, who pay considerably more each month than individuals living in the other types of neighborhoods. Thus, they have an established pattern of allocating a fixed sum monthly for living. Although generalizations from the survey data must be used with caution, if the pattern found in the study is applicable to the total population of "palomares", over 11,000 families (over half of the total families in these structures) would be likely candidates for the solutions produced under the new HG program. Since interest and need are found in other areas as well, this provides a perspective on the enormity of the existing demand. The program will produce only about 3,500 units, while four times that number should be built.

Tugurio residents are somewhat less likely to become buyers for the lots (and any other unit) than might appear initially, although 48% of the

respondents expressed interest in urbanized lots. Many of these families are already "owners" who pay very little or nothing at all for their house as a result of having acquired it through some form of land invasion or take over. This group was also the least likely to be actively looking for a new house. (61% responded "no" to this question.) On the other hand, the inaccessibility of these neighborhoods to public services has forced many families to spend large sums on alternative energy sources for cooking and light as well as for potable water. If these families realized that by access to public services they would reduce those costs which would make a substantial contribution to the mortgage payment, interest in the solutions could rise.

In Jutiapa, the majority rejected the urbanized lot as far too small to accommodate the small animals and gardens that are essential to that low income population. In Quezaltenango, the urbanized lot was not accepted by many not because it was considered too small but rather because they already had land and were looking for ways to build a house.

#### Core Unit

Forty five percent of the sample expressed strong interest in the core unit, again with the strongest market being found among "palomar" residents.

While "palomares" are very likely to have access to public services (water, sewerage and electricity), these are usually available to the tenants only for restricted periods in order to reduce costs to the owner. Therefore, the opportunity to purchase a single-family dwelling with services is highly sought after by this group. Given the higher income levels of the residents of the deteriorated central area and the high demand (49%), it would appear that this group is a very strong market.

The core unit was also in demand in Escuintla, where a strong market is anticipated because of the higher income levels and growth as compared to the other secondary cities.

#### Complete House

Demand falls for this unit in all areas except residents of the central areas of the cities. These groups generally represent a more stable population with higher incomes who are ready to move up.

Over 40% of the residents are currently owners of their homes which are geographically well situated and of a higher quality. Nearly all have sewerage, water and electric connections. Consequently the serviced lot and even the core unit do not necessarily meet this group's expectations of what they need to solve their housing problems. These families want and can afford the large unit.

TABLE IV-5

REASONS FOR LACK OF INTEREST BY TYPE OF SOLUTION

	<u>High Cost</u>		<u>Design</u>		<u>Other</u>	
	<u>Guate.</u>	<u>Sec. City</u>	<u>Guate.</u>	<u>Sec. City</u>	<u>Guate.</u>	<u>Sec. City</u>
Urbanized Lot	30.0%	59.0%	55.0%	27.5%	15.0%	13.5%
Core Unit	75.0%	82.0%	10.0%	2.0%	15.0%	16.0%
Complete House	89.5%	90.0%	2.0%	2.0%	9.0%	8.0%

\* See Tables IV-4 in Appendix for complete breakdown by neighborhoods in Guatemala City

TABLE IV-6

WILLINGNESS TO MOVE

	<u>Guatemala City</u>	<u>Secondary City</u>
<u>TOTAL POPULATION</u>	<u>75.0%</u>	<u>79.0%</u>
Palomar	85.0	89.0
Deteriorated Peripheral Area	76.0	78.0
Deteriorated Central Area	73.0	69.0
Tugurio	65.0	80.0

A common problem in the execution of housing programs is the reluctance of people to move. This does not appear to be a serious obstacle in Guatemala City. Three quarters of the people interviewed in Guatemala City indicated a willingness to move a considerable distance from their current house in order to become homeowners.

Some variations in response were found when the specific neighborhoods were analyzed. Those most willing to move (85%) are the residents of "palomares", all of whom are renters. Those living in deteriorated housing in central and peripheral areas are equally willing to make a move (73% and 76%). Residents in tugurios (65%) are least willing to move.

In short, the possibility of owning a home overcomes, in most cases, the natural tendency to stay in a familiar neighborhood. Moreover, they will stretch household budgets to purchase new units

TABLE IV-7

PERCENT OF SAMPLE WILLING TO PAY MORE FOR A NEW HOUSE

	<u>Guatemala City</u>	<u>Secondary City</u>
<u>Current Monthly Payment</u>	93.0%	95.0%
1 - 25	65.0	36.0
26 - 50	33.0	15.0
51 - 75	40.0	25.0
76 - 100	69.0	38.5

A significant factor is that in both the capital and the secondary cities families are willing to pay more than they are currently paying in order to obtain a new house.

## V. ADMINISTRATIVE/INSTITUTIONAL ANALYSIS

### A. Framework

For purposes of sharpening the analysis of the institutional arrangements the following provides a brief overview of the manner in which the project implementation will flow.

1. The Ministry of Finance will act as Borrower for the GOG. It will execute a trust agreement with the Bank of Guatemala (the Central Bank) establishing the Q.20 million fund for purposes of financing shelter for urban families below the median family income. This agreement will establish the parameters for its use, which are essentially those included in the project description and defined in the Implementation Agreement.

2. The Bank of Guatemala will then proceed to prepare a detailed description of the operational procedures and programmatic parameters of the fund and communicate to the 15 banks which qualify as approved participating financial entities of the FHA system the existence and characteristics of the new line of credit.

3. Since the Bank of Guatemala's notification to the banks announcing the existence of the new line of credit and its characteristics is published in the newspapers, notification is simultaneously received by the private developers/builders as well.

4. Interested developers will then prepare projects within the designated parameters and present their applications for financing to the various approved entities. These banks will, in turn, examine the projects for suitability. These approvals will be forwarded to the FHA requesting its approval under the GOG/AID HG project.

5. FHA requires the submission of plans, specifications and approvals of the respective municipal jurisdictions, which will all be studied by its Technical Division. The project will be analyzed from the point of view of design, structure, location and cost. If the project is pronounced acceptable (technically and cost-wise accessible to the target group), FHA will assign the project a Reservation of Insurance and so notify the bank. This in effect guarantees FHA issuance of insurance to FHA qualified purchasers.

6. The private developer commences construction. Interim financing is available to the participating banks from the GOG which they will on-lend to the private developer, or the commercial banks can opt to provide this financing from their own resources as well. Once construction begins, regular inspections at pre-arranged stages will be made by the FHA Department of Inspection. FHA will conduct a final inspection of the completed units and officially certify their acceptability to FHA for insurance purposes.

7. Beneficiaries will be approved regarding credit worthiness, first by the respective bank and finally by the FHA. The deed of sale is registered, FHA issues insurance against non-payment by the purchaser, and the respective bank, on behalf of the purchaser, issues the mortgage certificate in the amount of the debt. The bank discounts the mortgage certificate for the developer.

8. Now in possession of the mortgage certificates, the bank can issue an equivalent amount of mortgage bonds, with the mortgage certificates as guarantee. The term of the bond is identical to the term of the mortgage certificate. These bonds can be purchased by the Bank of Guatemala at par, thus reestablishing liquidity of the local bank or the bank can hold the certificates until such time as they want to market them in the secondary market place.

9. The respective bank services the mortgage certificates for a 1% fee and FHA receives 1% for the insurance it issues.

## B. Participating Institutions

The housing finance system in Guatemala has neither savings and loan associations nor a network of specialized mortgage banks. In the present structure, there are two institutions that jointly make up for the lack of a central housing finance entity. One of these is the Bank of Guatemala, the other being the FHA, the Institution for the Development of Insured Mortgages.

### 1. Bank of Guatemala

The Bank of Guatemala is an autonomous institution, created by Decree No. 215, dated December 11, 1945. It is the central bank of the nation and its purpose is "to promote the creation and maintenance of the monetary exchange and credit conditions most favorable to the orderly development of the national economy." (Art. 2). In its role as central bank, it is the only issuer of currency and it operates under the direction of the Junta Monetaria (Monetary Board).

The Bank of Guatemala attempts to maintain a satisfactory level of economic activity within the various sectors of the national economy via two main channels: (a) fiduciary operations of an internal or external nature; and, (b) opening of lines of credit or discounting for national financial institutions.

As a response to the severe decline on the home building industry that began in 1979, the Bank of Guatemala opened a line of credit to the housing sector to reactivate the economy and generate employment. The operation consisted of establishing a line of credit for Q.78 million to provide mortgage financing for individual units costing up to Q.44,000. The operational mode put into effect is the same described earlier in connection with the flow of the Guaranty funds in this program. The entire operation is conducted by the Credit Department of the Bank as a formal commitment by a

secondary mortgage market institution. To date the Q78 million is fully committed with approximately Q60 million disbursed.

The Bank of Guatemala operations have traditionally been characterized as soundly managed and employ up to date administrative technology.

2. Instituto de Fomento de Hipotecas Aseguradas (FHA)

The Institute for the Development of Insured Mortgages, FHA, came into existence via Decree No. 1448, dated June 7, 1961. However the corresponding "Reglamento" for that Decree, necessary for the start of operations, was not published until May 8, 1967.

The FHA is a decentralized institution whose basic function is to contribute to solving the housing problem by promoting private investment in housing via the issuance of mortgage insurance which protects the financial institutions against default.

As of December 31, 1981, FHA operations have authorized a total of 12,795 policies, representing an insured value of housing in the amount of Q.156,163,000. The table below shows the level of activity of the last three years:

<u>Year</u>	<u>Number Of Policies</u>	<u>Value of Mortgages</u>
1979	885	16,000,000
1980	1,181	27,000,000
1981	1,304	31,500,000

For more detailed information on FHA operations, see charts 6 thru 10 in Annex V.

The FHA is the lynch pin of this project and, indeed, of the private financial institutions' activities in the Guatemalan housing sector. The private sector banks will only finance housing via the FHA route. The secondary market operation of the Bank of Guatemala requires FHA insurance on primary instruments. As the institution which will effect the technical review and approval of all projects as well as qualify all beneficiaries via its credit analysis operation, FHA, in effect, will ensure compliance with below median family income requisites and the affordability range of housing types constructed. This double function fits perfectly within the range of activities routinely performed by that institution. The significant difference will be fine tuning the machine to serve a lower income group than previously served. From the point of view of work volume, the present staff of 82 should be capable of absorbing this HG assisted project without any additional staff. However short term technical assistance is contemplated to

assist with the adjustments required by the difference in target group. Technical standards within the purview of FHA need to be modified, as well as credit analysis requirements. These items are the objects of this assistance. Staff orientation will be undertaken.

The participation of FHA in this Housing Guaranty-assisted project, not only reflects current GOG policy which aims at a more equitable distribution of services and in particular evidences increased concern for lower income families, but in addition, addresses purely institutional concerns of FHA as well. The FHA leadership has been concerned about the possible saturation of the market for housing at the income levels where the program has traditionally operated and strongly supports this pilot effort directed at testing the feasibility of reorienting the previously adopted process to a largely untapped national market for their services.

### 3. Approved Entities

There are 15 "Approved Entities" or financial institutions approved to operate with FHA and thus are eligible to originate projects and service mortgages insured by that institution.

Of the 15, 13 are private banks in what is very much a private sector delivery system for housing. BANVI and the Banco Crédito Hipotecario Nacional are the approved public sector banks. Within the system, the Granai & Townson Bank clearly dominates regarding mortgage generation, having fully 37% of the total FHA insured mortgage portfolio. Furthermore, adding the portfolio of the Industrial Bank and the Agricultural Bank to that of Granai & Townson one notes that the three combined hold 65% of the total. For the 13 participating private commercial banks, their mortgage portfolio represented only 8.9% of the total of their savings and fixed deposits as of December 31, 1981.

Private sector banking is uniformly sophisticated with computerized control and management of portfolios. The total assets of the 13 private institutions represented here are in excess of Q.1,800 million. The commercial banks participated in the Q.78 million program financed by the Bank of Guatemala. Therefore, the additional demand on existing capacity represented by this project is not expected to be a problem although those institutions will be working with a new target group. A rather far flung network of branches with 65 offices outside Guatemala City will enable projects to be developed outside the capital.

The specific functions to be performed by the individual banks are the selection of the developer of the specific project, the initial credit analysis of the beneficiary and monthly collections. Results of the FHA insurance operation to date reflect a high performance level on all counts. The challenge of this pilot program rests in redirecting the efforts of an efficient and major housing delivery system to serve the needs of the poor. The project design team has purposely maintained the ongoing system unaltered to permit an accurate demonstration that the private developers and private banks can profitably operate with a proven system at lower income levels.

From the point of view of the banks, at a time when their traditional market shows signs of saturation or some holding back from the market due to political uncertainty, the opportunity to continue generating profitable mortgage certificates has its attraction. The mortgage certificates provide the banks with a 3% spread in addition to the 1% received for administering the mortgage. Furthermore, the income from the mortgage certificates is exempt from taxation. In addition, in a period of excess liquidity, the banks can repurchase the bonds sold to the Bank of Guatemala and remain with the mortgage certificates in their own portfolios.

For a list of approved entities and additional data refer to Annex V.

#### 4. National Housing Bank (BANVI)

BANVI, the National Housing Bank, while one of the two public sector institutions enrolled in the "Approved Entity" list of the FHA System described in (3) above, merits additional comment on the strength of its official role. As the official public sector housing institution, BANVI has traditionally spearheaded and developed the bulk of public sector financed housing. Given the fact that the private sector has concentrated in middle and upper income markets, BANVI's role as the principal supplier of relatively small amounts of housing for lower income families cannot be ignored.

BANVI's major post earthquake efforts have involved a \$40 million program financed jointly by the World Bank and the GOG, and the \$30 million Urban Shelter Improvement Program jointly financed by AID and CABEI. BANVI's experience in the simultaneous implementation of these projects has seen the institution's administrative/operational system stagger badly under the combined load. Though both projects are now well advanced after extended delays, the continued existence of what are essentially middle level management weaknesses stand clearly revealed. The difficult administrative device of special implementation units among other factors, has strained the institution's performance capability. BANVI has voiced its interest in participating in this program, specifically at the serviced site level where it has developed considerable field experience. The winding down of the two major projects which have claimed the principal portion of the institution's productive capacity will obviously leave BANVI with available capability to dedicate to this project. Notwithstanding the well documented implementation problems suffered by BANVI, it has "hands on" experience with minimum shelter solutions for the urban poor unique to Guatemala, and the institution has staked its claim to this portion of the spectrum of the typology of shelter solutions for the urban poor.

The project contemplates the allocation of funds among the "Approved Entities" on a first-come first-served basis; BANVI's experience in the design of serviced site projects should provide it with a real advantage in this regard.

BANDESA's post earthquake housing role was a special response to a national emergency, and that institution's production level has dropped significantly in the past few years. BANDESA is not an approved entity, but could provide support for the HG program in secondary cities as a promoter. It has considerable expertise for working in the interior of the country.

### C. Committees

Two committees, the Housing Policy Committee and Housing Standards and Environmental Committee will be established. They are discussed in Sections I, II and III of this paper. The former has been established and will be coordinated by FHA with set as secretary of this committee. FHA will chair the latter committee. Technical assistance will be provided to support the work of these committees to address the issues discussed in Section I.

## VI. ECONOMIC AND FINANCIAL ANALYSIS

### A. Economic Analysis

#### 1. General Economic Situation

Guatemala continues to suffer from the internal and external shocks that have plagued the economy since 1978. The worsening insurgency and its associated political violence have caused capital flight and all but destroyed the once booming tourist industry. With the onset of the recession in the industrialized countries, the world prices of Guatemala's principal export commodities -- coffee, cotton and sugar -- fell. The income effect from sharply reduced commodity export earnings was soon felt in a contraction in investment and consumer demand. The malaise in international commodity markets also has affected incomes in Guatemala's trading partners within the Central American Common Market, thus reducing demand for Guatemalan manufactured exports.

These conditions were soon reflected in slower economic growth and balance of payments problems. GDP growth has slowed from 5% in 1978 to 1% in 1981 and is forecasted to turn negative in 1982. Reliable unemployment figures are not available, but employment in construction has fallen from 35,000 in 1978 to 21,000 in 1981. The Guatemalan quetzal -- once considered a hard currency by the IMF -- has been badly shaken by current account deficits that have increased from \$35 million in 1977 to \$530 million in 1981. Net international reserves have fallen from \$732 million in 1978 to about \$25 million at the end of 1981.

It is only fair to state that the conditions described above have been the fate of many small, export dependent, developing countries in the late 1970s, and that, so far, Guatemala has weathered the storm better than most. In Central America no country has been spared the economic consequences of the fall in world commodity prices and the very tense political situation. But in the midst of this regional crisis, Guatemala with a conservative monetary and fiscal policy and better endowed with natural resources had in 1981 the highest growth rate, the second lowest inflation rate and the lowest current account deficit as a percentage of GDP. With its relatively large population, its diversified natural resource base and its skilled entrepreneurial class, Guatemala has the potential to surmount its current economic problems.

#### 2. Capacity to Pay

In spite of Guatemala's financial difficulties the Government should have little difficulty servicing the HG loan. Outstanding public sector external debt at the end of 1981 was about \$600 million or about 8% of GDP. The debt service ratio accounted for about 3.9% of export earnings in 1981. This ratio is expected to climb to 4.2% in 1982. The \$10 million HG loan would add less than one percentage point to Guatemala's service ratio. Furthermore, the Government gives first priority for foreign exchange allocation to servicing public sector external debt.

### 3. Macroeconomic Impact of the HG Project

There will be \$20 million in construction activity under the HG project or \$6.67 million annually during the three-year project life. According to the latest national accounts data, the construction sector in Guatemala accounts for about 3.5% of GDP. In terms of the total macroeconomic picture in Guatemala, therefore, the HG loan will have a very small impact, even when the multiplier effects on supplier industries are considered.

The impact of the project will be more significant on the construction industry itself. The construction industry in Guatemala is now working at less than 50% capacity and employs about 21,000 people. The HG loan is expected to generate 835 new jobs in construction annually (the direct employment effect) and 584 new jobs in building supply industries (the indirect employment effect) for a total of about 1,420 jobs annually over the life of the project<sup>1/</sup>. To this must be added the employment effect stemming from increased incomes in construction and in its supplier industries. This would easily double the direct and indirect effects bringing the total employment generation of the HG loan to perhaps 2,840 new jobs each year. It must be emphasized that many of these new jobs will be among the target population.

For Guatemala City -- where about 70% of the project activity will take place -- the new employment will be especially beneficial. From 1978 to 1981 total construction activity in Guatemala City has fallen from \$46 million to \$19 million<sup>2/</sup>. Residential construction fell from \$18 to \$11 million during the same period. For the residential construction sector in Guatemala City, therefore, \$4.67 million annually ( $\$6.67 \text{ million} \times 0.70$ ) in new activity will represent an increase of 42% over 1981.

### 4. Inflation

The HG loan should have little or no inflationary impact. The general economic recession, combined with conservative fiscal and monetary policies, has kept inflation rates relatively low. As measured by the GDP deflator, inflation in 1981 was 9%; as measured by the wholesale price index it was 4%. In the construction sector it was higher, 15% as measured by the Camara de Costruccion index of general construction costs. But with 50% or more unused capacity in the construction sector, \$4 million in new construction activity

<sup>1/</sup> Of the \$6.67 million 30% or \$2.0 million in labor cost. On a monthly basis this is \$167,000. Based on an average of Q200 per worker, this would generate 835 jobs. For the indirect employment effects, the Camara de Costruccion estimates a multiplier of 1.7; at least 95% of building materials are domestically supplied.

<sup>2/</sup> Data from the Camara de Costruccion.

will have little effect on the price level in construction or in the Guatemalan economy generally.

## B. Financial Analysis

### 1. Background on Financial Policies

The Guatemalan capital market has enjoyed a period of basic stability in the last decades and up to the present time. This has resulted from a sound position regarding external borrowing and the availability of international resources coupled to a conservative policy regarding monetary expansion. Taken in combination with internal production levels this has resulted in keeping inflation controlled at approximately 10% per annum and most often less.

One of the determinant factors in this situation has been the stability of the interest rates which are fixed by the Monetary Board. The Board establishes the maximum limits chargeable for borrowing and for lending operations and within these ceilings the financial institutions fix their individual policies.

For the seven-year period from 1974 to 1981, interest rates were set at an 11% ceiling for lending operations and 9% was the passive rate. In October of 1981, the Monetary Board modified the rates, raising to 15% the ceiling on lending operations and to 13% the ceiling payable on savings.

In order to evaluate the behavior of the market and the financial institutions in this field, one should consider the following:

(a)

The recent interest rate rise is not a response to inflationary pressures, but is an adjustment to real rates without distorting internal costs. If one compares the interest rate and the inflationary process, one finds that the interest rates in Guatemala, comparatively speaking, are the highest in the Central American region on the strength of their being most consistently true positive rates of interest.

(b)

Given that the problem in Guatemala is not so much one of inflation but rather of recession, a gradual increase without speculative pressures is an adequate mechanism for reactivating the economy. In this sense, the device of resorting to special lines of credit for specific sectors as utilized by the Bank of Guatemala, and illustrated in the case of the special line of credit for housing, is highly positive.

Following there is an examination of effective interest rates during the previous three-year period in accordance with private sector balances.

(In Thousands of Quetzales)

	<u>1979</u>	<u>1980</u>	<u>1981</u>
Total Assets	1,404,390	1,604,390	1,811,020
Productive Assets (Averages)	898,340	1,078,340	1,272,950
Portfolio Yield	93,559	113,675	133,186
Effective Interest Rate	<u>10.41</u>	<u>10.54</u>	<u>10.46</u>
Savings Deposits and Term Deposits (Average)	732,513	829,527	946,216
Interest Paid	44,440	52,722	70,385
Effective Interest Rate	<u>6.07</u>	<u>6.36</u>	<u>7.44</u>

The results of this policy clearly demonstrate the general equilibrium maintained by the banking system. But in spite of the low cost of resources, the velocity of growth of the interest rates for savings in 1981 demonstrates their ability to react in anticipation of changes in the interest rates on loans. The timely reaction of the Monetary Board in October, 1981 once again permitted the market to seek an equilibrium between margins and costs.

As of March 31, 1982 the interest rate system in effect by the banking community has been the following:

- a. Savings accounts (up to Q.1,000.00) - 6%  
Savings accounts (under Q.100,000.00) - 7-9%  
Savings accounts (over Q.100,000.00) - 10%
  - b. Fixed term deposits (minimum balance Q.1,000.00)  
- Balances under Q.100,000.00 - 7-9%  
- Balances over Q.100,000.00 - up to 11.25%
2. HG Program Interest Rates

Commercial rates for housing in today's market represent an effective cost to the borrower of 13%. For the moment, both the private and public sector policy is to maintain this rate and reserve the application of the 15% rate to commercial credit.

If one were to carefully analyze the mortgage certificate as a financial instrument, what emerges is that the effective return on the operation more nearly approximates the 15% legal maximum.

The 13% which the client pays breaks down as follows:

11% nominal interest on the mortgage certificate.

1% for administration of the mortgage.

1% for FHA insurance.

The approved entity which holds the mortgage certificate will receive 1% for administration and 11% as nominal interest. Since the interest earned on the mortgage certificates are tax exempt, this permits a reduction of the value of the tax liability, on the one hand, and proportionately increases effective interest in accordance with the tax rate, on the other hand.

A conservative estimate will permit the assignment of a specific weighting to this tax saving of 20%, which would increase the gross interest earned to 13.2%, which added to the 1% earned for administration effectively places the operation at a level of 14.2%. Viewed in this manner,

the operation by the private sector banks to be conducted in connection with the HG program can be seen as effectively being closer to the maximum legally authorized in the market than it initially appears.

Should it be considered opportune in relation to market conditions to sell the mortgage certificates, they would constitute a financial instrument yielding among the highest rates of return in the market. Another feature of this instrument is that it does not affect minimal capital requirements imposed on commercial banks in other financial operations.

### 3. Origin of Funds

In the present program, the Housing Guaranty funds will be secured in the capital market of the United States.

A line of credit for housing will be made available by the Bank of Guatemala including the GOG counterpart. The origin of these counterpart funds is the mass of credit annually placed at the disposition of the national economy by the Bank of Guatemala. Discussions with GOG officials indicated that probably these funds will not derive from the national budget, nor from the emission of additional currency but rather from the generation of resources which results from the normal activity of the central bank.

### C. Financial Plan

A cash flow analysis of the proposed program was made and is contained in Annex VI B. The HG loan will amount to \$10 million bear an assumed 25 year term and have a grace period on repayment of principal of 10 years. The interest rate to be charged by the Bank of Guatemala is 8% and the charge to the beneficiaries will be 13%. The banks will receive a 3% spread and 1% administration charge and FHA will receive 1%.

The disbursement of program funds will include an advance of \$4 million (of which \$2 million are HG) with remaining resources being disbursed semi-annually from June, 1983 to December, 1985 against mortgage certificates. Repayment has been projected assuming that 100% of the resources will be invested and will be amortized over 15 years. During the grace period amortizations will be immediately reinvested in similar projects. The cash flow projections are positive and shows that over ten years approximately \$5.8 million would be generated for reinvestment in similar types of projects.

## VII. IMPLEMENTATION PLAN

### A. Participating Institutions

The borrower will be the Ministry of Finance. It will bear the foreign exchange risk, guarantee the loan and be responsible for repayment to the U.S. Investor. The Bank of Guatemala will establish a line of credit of Q.20 million for the program. These resources will be generated by the Bank of Guatemala.

FHA will be responsible for monitoring program implementation and coordinating disbursements to approved entities. It will establish new technical and credit standards for low-cost shelter solutions to be delivered to the target group. FHA will insure units owned by beneficiaries. It will also certify contractors and conduct inspections of work in place and when units are completed. It will also perform credit analysis and approval of beneficiaries.

The banking system will sponsor the developer and thus commence the FHA process. It will extend long-term mortgage financing to beneficiaries as well as some of the construction financing. The banks will service the debts incurred. In conjunction with this they will make the initial credit analysis and approve potential beneficiaries, but FHA will make the determining one. Funds will flow to the banking system on a first-come, first-served basis as long as projects meet the criteria of the program.

Private contractors and promoters will be responsible for organizing the market of beneficiaries, acquiring land and designing projects, obtaining public approval from the municipalities for the projects and sales. Therefore, the private contractors will be assuming a risk it has not had to incur in publicly funded projects.

In addition to these entities a committee has been established to review progress of the program and examine the feasibility of institutionalizing this or some other mechanism for housing finance and production. Technical assistance will be directed at providing this group with analyses of the system's ability to serve a long-term role in low cost housing. This committee consists of high level GOG officials from the MCF, BOG, FHA, BANVI and SGCNPE. The FHA will act as the Secretary of this group because of its key role in the project.

FHA will establish a technical committee consisting of municipal, INFOM and Ministry of Communications and Public Works officials, as well as officials from the Chamber of Construction and the National Association of Home Builders. This group will study current construction standards and adaptations required to reach the target group.

## B. Implementation, Loan and Guaranty Agreements

An Implementation Agreement will be signed by the MOF, BOG, and FHA. This agreement will be negotiated shortly following program authorization. The Agreement will outline expected outputs and include an implementation schedule. A Loan Agreement will follow. This Agreement will be signed by the MOF and the U.S. Investor and will set forth the terms of the HG Loan. A Guaranty Agreement will be signed by AID assuring payment to the U.S. Investor against any loss.

The Implementation Agreement will be drawn up and signed in November 1982 following program authorization. This will permit the MOF to seek a U.S. Investor and negotiate a loan around the end of the calendar year.

## C. Use of Resources

### 1. Financial Resources for Solution Financing

A line of credit will be drawn from the Bank of Guatemala for 0.20 million to be allocated over a three year period. Half the resources will be counterpart funds from the banks operations and normal activities. An amount of \$2 million in HG resources will be advanced to the MOF with subsequent disbursements to be made based upon the generation and submission of eligible mortgages.

### 2. Technical Assistance

Grant funding of \$300,000 will be authorized, \$100,000 in FY 83 and \$200,000 in FY 84, to provide technical assistance for program implementation. The resources will be used to fund a long-term advisor and short-term consultants.

The estimated budgets for the technical assistance personnel are as follows:

<u>Types of Assistance</u>	<u>Person/Months</u>	<u>Est. Costs</u>
Long-Term Advisor	18	\$160,000
Construction and Environmental Standards	6	60,000
Credit Analysis Procedures and Criteria	2	20,000
Mobilization of Resources/Housing Finance Systems and Policy	<u>6</u>	<u>60,000</u>
TOTAL	32	\$300,000

In addition to the assistance above, the services of the Inter-American Savings and Loan Union (IASLU) will be available for the benefit of the program. The Union finances its assistance in part with an HG funded cooperative agreement which has been extended to mid-1984. It is an organization which provides specialized assistance to its membership which includes the FHA. PRE/HUD through regional contracts and RHUDO/LA with its staff will also provide funding for certain aspects of the short term assistance as well as program evaluations.

D. Scope of Technical Assistance

1. Long-Term Advisor

This advisor will work closely with FHA in monitoring and evaluating on-going program implementation. The advisor will coordinate the provision of short-term technical assistance in terms of scheduling, monitoring and follow-up.

2. Construction and Environmental Standards

This work will address all current construction regulations and standards that affect the provision of basic shelter. FHA and municipal norms will be examined to determine required changes to lot size and dimensions, constructed space and its characteristics, urbanization standards, infrastructure norms and other regulations so that FHA insurance can be extended to low-cost housing on a regular basis. Municipal approval requirements will be addressed. Particular attention will be paid to establishing standards which are flexible so they do not become impediments as construction costs rise, and permit technological innovations in construction practices and materials to be made as they are developed and marketed.

Assistance will be provided on the development of environmental guidelines on site selection and construction practices in the field vis-a-vis grading, site preparation, and water runoff. Technical assistance to the Housing Standards and Environmental Committee will also be provided to identify priority areas for project development in light of sewerage and water quality issues. Site specific water and sewerage treatment facilities maintenance will be discussed by the committee with the Instituto de Fomento Municipal (INFOM) which is responsible for such activities. INFOM and its municipality training program need to be related to community groups so that they may support the maintenance efforts. Coordination of municipal budget allocations by the national government will be difficult to accomplish in this pilot program.

### 3. Credit Analysis and Procedures

An expert on credit analysis and procedures will review private bank and FHA regulations in light of income and employment characteristics of the target group. FHA regulations are the most important as it is the insuring agency. Emphasis will be placed on streamlining income verification procedures. Also foreclosure policies need to be examined in light of the target group.

### 4. Housing Finance Systems and Policy

Assistance on evaluating the mechanism being tested in this program and examining its ability to continue to serve a long-term role in low-cost housing will be provided to the Housing Policy Committee established by the Minister of Finance. The financial policies in terms on interest rates, resource base and instruments to capture resources will be studied. Discussions will stress savings mobilization, particularly tapping the Small Savers market, to increase the flow of lower cost resources to the sector. Public policy on bonds, and utilization of public institutional funds such as the Guatemala Social Security System will be examined as they relate to the potential to increase resource flows. The operation of the mechanism will be evaluated in terms of portfolio management strengthening.

### E. Conditions Prior to Disbursement

An Implementation Agreement for the program will have been signed by the MOF, BOG and FHA. Prior to seeking a U.S. investor and the first disbursement of HG resources, the following conditions to first disbursement will be applied:

( i) The Ministry of Finance and Bank of Guatemala will have executed an agreement establishing a trust agreement for financing shelter for urban families below the median according to the general guidelines of this program.

( ii) FHA will have established the Housing Standards and Environmental Committee.

F. Evaluation Plan

The evaluation plan of the program will center on the actual physical production of units, monitoring technical assistance and its results, and the beneficiaries. With regard to implementation the evaluation will examine which institutions are participating in the financing and production of projects, why, and the problems that are occurring. Particular emphasis will be given to the process and points in the process that need to be strengthened.

Technical assistance scheduling and impact will be evaluated. Also beneficiaries will be surveyed to determine their characteristics, levels of satisfaction, problems with the units and how they might be improved.

G. Negotiating Status

A series of meetings have been held with the Minister of Finance, Vice President of the Bank of Guatemala, General Secretary of the National Economic Planning Council, President of FHA, President of BANVI, the Presidents of five banks, the Chamber of Construction and the Association of Home Builders. A document was provided which served as the basis for detailed discussion about the purpose of the program and financial, social and technical details. A letter from the Minister of Finance (Annex II-A) is attached.

PROJECT DESIGN SUMMARY

Logical Framework

Life of Project: From FY 1982 to FY 1985

Total U.S. Funding: \$10 Million

Date Prepared: September 1982

NARRATIVE SUMMARY	OBJECTIVELY VERIFICABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes. (A-1).</p>	<p>Measures of Goal Achievement: (A-2).</p>		
<p>To improve the living conditions of the urban poor in Guatemala by broadening the mix of institutions producing shelter affordable by the AID target group and expanding production levels to satisfy unmet demand.</p>	<p>1. Overall production of housing for low-income families increases so that the housing deficit of these income groups either begins to grow at a lower rate; or, in fact, begins to decline.</p> <p>2. Increased participation in the production of low-cost housing solutions by the private sector.</p>	<p>1. GOG national housing statistics.</p> <p>2. Reports of banking institutions, FHA.</p>	<p>1. That the high priority assigned by the GOG to providing shelter for low-income families will continue in the immediate future.</p> <p>2. The GOG policies allow private initiative to express itself freely.</p>
<p>Project Purpose: (B-1)</p>	<p>Conditions that will indicate purpose has been achieved. End of Project Status: (B-2).</p>		
<p>1. Assist GOG in meeting continuing shortage of low-income housing.</p>	<p>1. Additional funds are flowing to low-cost housing programs.</p>	<p>1. Housing finance statistics maintained by the GOG.</p>	<p>1. That the private sector will react positively and enter the low-cost housing field if a profitable, stable market for such housing is demonstrated to exist.</p>
<p>2. Expanding the institutional base for the production of basic shelter affordable by the urban poor by involving the private sector banking and construction industries.</p>	<p>2. Private financial institutions channeling increased resources toward low-cost housing solutions.</p>	<p>2. Inspection of reports of private financial institutions and FHA.</p>	<p>2. That the capacity of the private sector to construct substantial increases in the volume of low-cost housing exists.</p>

3. GOG policies are developed with regard to increasing volume of low-income housing produced.

3. FHA extends mortgage insurance to low-cost housing

4. Private construction firms participate more actively in building low-cost housing solutions.

5. Shelter production will be financed according to internal costs of resources to permit additional resource mobilization.

6. Set of reports on alternative future resources for financing low-cost housing.

Project Outputs: (C-1)

1. The sale of low-cost housing solutions which reflect all construction and related costs as well as mortgage financing that is consistent with internal capital markets and GOG interest rate policies.

2. FHA construction standards which permit low-income units to be insured and low-income beneficiaries to be qualified.

3. The refocusing of the private sector delivery system including promoters and contractors involved in low-cost housing projects to serve below median income families.

Magnitude of Outputs: (C-2)

1. Approximately 3,544 low-cost solutions built in Guatemala, of which approximately 70% will be in metropolitan Guatemala City and 30% in other urbanized areas.

2. A written set of criteria by which FHA will insure low-cost units affordable by the target group.

3. A substantial increase in the volume of mortgages for low-cost shelter held by private sector institutions.

3. Inspection of FHA's reports.

4. Inspection of the annual reports of private construction firms.

5. Inspection of Bank of Guatemala's records on housing programs and AID records.

(C-3)

1. Requests for disbursements made by the Bank of Guatemala to the Ministry of Finance.

2. Monthly reports.

3. Project records.

3. That private financial institutions and FHA are able to develop effective working relationships for low-cost housing programs.

1. The private sector can produce low-cost housing units at cost estimated in project planning discussions.

2. Families earning less than the median urban family income for Guatemala are willing to take on 20 years + mortgages at interest rates tied to internal costs of resources.

3. Affordable sites can be located.

4. Low-cost shelter approximately 30% of solutions being provided outside metropolitan Guatemala City.

4. Project monitoring by RHUDO/LA.

4. The institutions have the administrative capacity to carry out an increase in their volume of mortgages.

5. Annual and end of project evaluations

5. Sufficient construction materials and a sufficient supply of appropriately skilled labor is available.

6. Sufficient political stability is maintained to allow free initiative to the private sector.

Project Inputs: (D-1)

1. AID

1.

1. AID-Ministry of Finance-Bank of Guatemala contracts, disbursements.

1. GOG remains committed to providing \$10 million.

a. Housing Guarantee Loan

a. \$10,000,000

b. Technical Assistance Grant

b. \$300,000 (32 person/months of TA)

2. Government of Guatemala Counterpart Funds

2. \$10,000,000

2. GOG financial reports.

2. Families earning less than the median urban family income have sufficient savings to afford a down-payment.

3. Beneficiaries downpayments.

3. \$2,222,000

3. Inspection of records of participating financial institutions.

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TAGS:

(522-RC-004)

1. THE DAEC REVIEWED AND APPROVED SUBJECT PID ON JANUARY 21, 1982; HOWEVER, HUMAN RIGHTS CONCERNS AS OUTLINED IN PARA 2 WILL NEED TO BE RESOLVED BEFORE MISSION SHOULD MOVE FORWARD WITH PROJECT DEVELOPMENT.

2. HUMAN RIGHTS CONSIDERATIONS. THE DAEC DISCUSSED THE HUMAN RIGHTS ISSUE EXTENSIVELY. CURRENT POLICY WITH RESPECT TO GUATEMALA IS THAT PROJECTS WITH THE GOVERNMENT OF GUATEMALA MUST DIRECTLY BENEFIT THE MOST NEEDY. THE LAC BUREAU IS REQUIRED TO DEMONSTRATE AND WILL HAVE TO CERTIFY IF REQUESTED BY THE HUMAN RIGHTS WORKING GROUP (CONSISTING OF STATE, TREASURY, AID AND OTHER REPRESENTATIVES), THAT THE HUMAN RIGHTS CRITERIA ARE MET BEFORE THE PROJECT IS AUTHORIZED. THE PRESENT CRITERIA FOR DETERMINING THE MOST NEEDY UNQUOTE ARE OUTLINED IN AIDTO CIRCULAR A150, DATED 12/13/77 WHICH WAS SENT TO MISSION IN APRIL 1981. THE REQUIREMENTS FOR DEFINING WHAT IS MEANT BY

QUOTE DIRECTLY BENEFITING THE NEEDY UNQUOTE ARE PRESENTLY UNDER REVIEW AND ARE BEING UPDATED. THE PROJECT WILL NEED TO MEET THE HUMAN RIGHTS CRITERIA IN ORDER TO BE APPROVED. THE HUMAN RIGHTS WORKING GROUP IS SCHEDULED TO MEET MID FEBRUARY TO DECIDE WHICH PROJECTS WILL REQUIRE THEIR APPROVAL BEFORE AUTHORIZATION AND TO ESTABLISH THE PROCEDURE WHICH WILL BE FOLLOWED FOR THE REVIEW. IN LIGHT OF THESE CONSIDERATIONS, SUGGEST THAT MISSION AWAIT GUIDANCE ON OUTCOME OF MEETING BEFORE PROCEEDING WITH PROJECT DEVELOPMENT. AID/S WILL KEEP THE MISSION UPDATED AS TO THE STATUS OF THESE CONSIDERATIONS.

THE FOLLOWING COMMENTS AND GUIDANCE ARE PROVIDED TO ASSIST MISSION IN PROJECT DEVELOPMENT AND PREPARATION OF THE PROJECT PAPER IF THE HUMAN RIGHTS CONCERNS OUTLINED ABOVE ARE RESOLVED IN SUCH A FASHION WHICH WOULD PERMIT THE PROJECT TO BE FEASIBLE.

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4. POLICY CONSIDERATIONS.

-- A. CONCERN WAS EXPRESSED IN THE DAEC REGARDING THE EXTENT OF POLICY CHANGES LEADING TOWARD A LONG TERM STRATEGY FOR INSTITUTIONALIZING A SYSTEM FOR MEETING THE SHELTER NEEDS IN GUATEMALA. THE PP SHOULD EXPLORE DEVELOPING A STRATEGY WHICH IS DESIGNED TO LEAD TO A LONG-TERM SOLUTION TO THE SHELTER NEEDS OF THE POOR IN GUATEMALA. IN VIEW OF THE RESISTANCE TO THE ESTABLISHMENT OF A SAVINGS AND LOAN SYSTEM BY THE GOG AND PRIVATE BANKING SECTOR, THE PROJECT SHOULD EXPLORE ALTERNATIVES WHICH WOULD ADDRESS THE LONGER TERM NEED TO MOBILIZE LOCAL RESOURCES CAPABILITY FOR LOW-COST HOUSING. THE DAEC VIEWED THE MOBILIZATION OF DOMESTIC RESOURCES AS CRITICAL IN THIS REGARD.

*Amended  
PID Doc  
Background  
Drawings*

-- B. THE PP SHOULD MAKE A CLEAR CASE THAT BANVI AND BANDESA HAVE THE CAPABILITY TO PARTICIPATE IN THE PROJECT. THE PARTICIPATION OF BANVI AND BANDESA IN THE PROJECT SHOULD BE JUSTIFIED BASED ON THE ABILITY OF THESE INSTITUTIONS TO REACH THE LOW INCOME BRACKET. IN ADDITION, THIS POINT IS OF PARTICULAR IMPORTANCE IN VIEW OF THE HUMAN RIGHTS CONCERN IN ORDER TO DEMONSTRATE THAT THE INVOLVEMENT OF THESE INSTITUTIONS WILL ASSURE THE PROVISION OF LOW COST SOLUTIONS AND THEREBY BENEFIT THE NEEDY.

-- C. ALTHOUGH IT IS UNDERSTOOD THAT INCREASING INTEREST RATES TO LEVELS REFLECTING THE TRUE COST OF MONEY DOES NOT SEEM FEASIBLE AT THIS TIME, WE ENCOURAGE THE MISSION TO EXAMINE WHETHER INTEREST RATES FOR ALL SHELTER SOLUTIONS PROPOSED IN THE HG SHOULD BE UNIFIED AT THE HIGHEST POSSIBLE RATE. IF AN INTERNAL SUBSIDIZATION OF RATES FOR LOWER COST SOLUTIONS, AS PROPOSED IN THE PID, IS INCLUDED IN THE PP, THIS SHOULD BE FULLY EXPLAINED AND JUSTIFIED. THE INTEREST RATE ISSUE SHOULD ALSO BE DISCUSSED IN TERMS OF THE IMPACT IT WILL HAVE ON COUNTERPART CONTRIBUTIONS.

-- D. IN VIEW OF THE CONSIDERATIONS ABOVE, THE DAEC CONCLUDED THAT IF THE PROJECT IS DEVELOPED, A MUCH STRONGER CASE MUST BE ARTICULATED FOR THE PROPOSED DOLS 20.0 MILLION LEVEL IN THE PID AS OPPOSED TO THE DOLS 10.0 MILLION CURRENTLY PROGRAMMED. IN ORDER TO JUSTIFY A DOUBLING OF THE PROGRAMMED AMOUNT OF DOLS 10.0 MILLION, THE PROJECT MUST REPRESENT MORE THAN A MECHANISM TO CHANNEL FUNDS TO BUILD 7,000 HOUSES. THE STRATEGY WOULD NEED TO INCORPORATE POLICY CHANGES SUCH AS AN INCREASE IN INTEREST RATES AND/OR THE ESTABLISHMENT OF A LOCAL FINANCIAL CAPABILITY AS DISCUSSED IN PARA 4A IN ORDER TO PRESENT A LONG TERM SOLUTION TO THE SHELTER NEEDS OF THE POOR IN GUATEMALA.

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Background  
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5. TARGETING. THE MISSION MIGHT WANT TO CONSIDER THE INCLUSION OF UPGRADING EFFORTS AS PART OF THE PROJECT STRATEGY AS WELL AS A GREATER EMPHASIS ON ACTIVITIES SUCH AS SITES AND SERVICES AS POSSIBLE AVENUES OF TARGETING THE NEEDY.

6. PROJECT MANAGEMENT AND COORDINATION. THE PP SHOULD DISCUSS HOW THE MISSION PLANS TO MONITOR AND COORDINATE PROJECT ACTIVITIES.

7. ENVIRONMENTAL CONCERNS. FIVE CRITICAL AREAS OF ENVIRONMENTAL CONCERN WERE OUTLINED IN THE IEE. THE PP SHOULD THOROUGHLY DISCUSS THESE ISSUES AND STATE HOW THE PROPOSED PROJECT WILL ADDRESS THESE CONSIDERATIONS. BUREAU ENVIRONMENTAL THRESHOLD DECISION WILL BE MADE FOLLOWING PRESENTATION OF EVIDENCE OF FINAL DISPOSITION OF CONCERNS IDENTIFIED IN THE IEE. STOESSEL

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STATE 38760

## THE HOUSING GUARANTY PROGRAM

STATUTORY CHECKLISTGUATEMALAPROJECT NO. 520-HG-004ANSWER YES/NO PUT PP PAGE  
REFERENCES AND/OR EXPLANATIONS  
WHERE APPROPRIATEA. General Criteria Under HG Statutory  
Authority.Section 221(a)Will the proposed project meet the  
following criteria.

- (1) is intended to increase the availability of domestic financing by demonstrating to local entrepreneurs and institutions that providing low-cost housing is financially viable;
- (2) is intended to assist in marshalling resources for low-cost housing;
- (3) supports a pilot project for low-cost shelter, or is intended to have a maximum demonstration impact on local institutions and national policy; and,
- (4) is intended to have a long run goal to develop domestic construction capabilities and stimulate local credit institutions to make available domestic capital and other management and technological resources required for effective low cost shelter programs and policies.

YESYESYESYESSection 222(a)

Will the issuance of this guaranty cause the total face amount of guaranties issued and outstanding at this time to be in excess of \$1,718,000,000?

NO

Will the guaranty be issued prior to  
September 30, 1984?

YES

Section 222(b)

Will the proposed guaranty result in  
activities which emphasize:

(1) projects providing improved home  
sites to poor families on which to  
build shelter and related services;  
or

NO

(2) projects comprised of expandable  
core shelter units on serviced sites;  
or

YES

(3) slum upgrading projects designed to  
conserve and improve existing shelter;  
or

NO

(4) shelter projects for low-income people  
designed for demonstration or institu-  
tion building; or

YES

(5) community facilities and services in  
support of projects authorized under  
this section to improve the shelter  
occupied by the poor?

NO

Section 222(c)

If the project requires the use or con-  
servation of energy, was consideration  
given to the use of solar energy  
technologies, where economically or  
technically feasible?

YES

Section 223(a)

Will the A.I.D. guaranty fee be in an  
amount authorized by A.I.D. in accordance  
with its delegated powers?

YES

Section 223(f)

Is the maximum rate of interest allowable to the eligible U.S. Investor, as prescribed by the Administrator, not more than one percent (1%) above the current rate of interest applicable to housing mortgages insured by the Department of Housing and Urban Development?

YES

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Section 223(j)

(1) Will the proposed Housing Guaranty be coordinated with and complementary to other development assistance in the host country?

YES

---

(2) Will the proposed Housing Guaranty demonstrate the feasibility of particular kinds of housing and other institutional arrangements?

YES

---

(3) Is the project designed and planned by A.I.D. so that at least ninety percent (90%) of the face value of the proposed guaranty will be for housing suitable for families below the median urban income for housing in urban areas, in the host country?

YES

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(4) Will the issuance of this guaranty cause the face value of guaranties issued with respect to the host country to exceed \$25 million in any fiscal year?

NO

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(5) Will the issuance of this guaranty cause the average face value of all housing guaranties issued in this fiscal year to exceed \$15 million?

NO

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Section 238(c)

Will the guaranty agreement provide that will cover only lenders who are "eligible investors" within the meaning of this section of the statute at the time the guaranty is issued?

YES

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B. Criteria Under General Foreign Assistance Act Authority.

Section 620/620A

(a) Does the host country meet the general criteria for country eligibility under the Foreign Assistance Act as set forth in the country eligibility checklist prepared at the beginning of each year?

YES

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(2) Is there any reason to believe that circumstances have changed in the host country so that it would now be ineligible under the country statutory checklist?

NO

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ASSISTANT  
ADMINISTRATOR

GUARANTY AUTHORIZATION

PROJECT 520-HG-004

PROVIDED FROM: Housing Guaranty Authority

FOR : The Government of Guatemala

Pursuant to the authority vested in the Assistant Administrator, Bureau for Latin America and the Caribbean, by the Foreign Assistance Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance to eligible U.S. investors (Investor) acceptable to A.I.D. of guaranties pursuant to Section 222 of the FAA of not to exceed Ten Million Dollars (\$10,000,000). The guaranties shall assure against losses (of not to exceed one hundred percent (100%) of loan investment and interest) with respect to loans, including any refinancings thereof, made to finance housing projects in Guatemala.

These guaranties shall be subject to the following terms and conditions:

1. Term of Guaranty: The loans may extend for a period of up to thirty years (30) from the date of disbursement and may include such terms and conditions as shall be acceptable to A.I.D. The guaranties of the loans shall extend for a period beginning with disbursements of the loans and shall continue until such time as the Investor has been paid in full pursuant to the terms of the loans.
2. Interest Rate: The rate of interest payable to the Investor pursuant to the loans shall not exceed the allowable rate of interest prescribed pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans made in the long term U.S. capital markets.
3. Government of Guatemala Guaranty: The Government of Guatemala shall provide for a full faith and credit guaranty to indemnify A.I.D. against all losses arising by virtue of A.I.D.'s guaranties to the Investor or from non-payment of the guaranty fee.

4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum of the outstanding guarantied amount of the loans plus a fixed amount equal to one percent (1%) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.
  
5. Other Terms and Conditions: The guaranties shall be subject to such other terms and conditions as A.I.D. may deem necessary.

---

Otto Reich  
Assistant Administrator  
Bureau for Latin America and the Caribbean

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Date

Clearances:

PRE/HUD:FHansen	_____	Date	_____
PRE/HUD:JHowley	_____	Date	_____
PRE/HUD:PVitale	_____	Date	_____
FM/LMD:ESOWens	_____	Date	_____
GC/LAC:GWinter	_____	Date	_____
LAC/DR:DJohnson	_____	Date	_____

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INITIAL ENVIRONMENTAL EXAMINATION

PROJECT LOCATION : Guatemala City and Other Urban Areas

PROJECT TITLE : GOG/Private Sector Low-Cost Housing

PROJECT NUMBER : 520-HG-004

LIFE OF PROJECT : Three years

IEE PREPARED BY : Jeffery Boyer

DATE : December 1981

ACTION RECOMMENDED: Negative Determination

CONCURRENCE :   
Peter Kolar, Acting Director  
USAID/Guatemala

DATE: September 9, 1982



## I. SUMMARY OF EXISTING URBAN POVERTY AND SHELTER CONDITIONS IN GUATEMALA

In order to assess the probable environmental effects it is imperative that existing baseline conditions be documented, particularly in those areas where changed conditions are anticipated. The following description of existing poverty conditions in Guatemala is based upon a review of the current literature (published and unpublished), selected interviews with Guatemalan authorities and site visits. The topics discussed below are considered the most salient in understanding what urban poverty implies in Guatemala.

### A. Demographic Growth Trends

Guatemala's population is increasing at the relatively high rate of 2.9% annually. It is estimated to increase from 7.3 million in 1980 to 12.7 million by 2000 assuming constant growth. This represents an absolute increase of 73% in just 20 years. Due to poor living conditions and severely limited economic opportunity in the countryside, the urban population is expanding at a rate higher than that of the rural areas. In 1950, 25% of the country's population lived in urban areas. By 1980, this had increased to 40%. By 2000 the population is expected to be roughly evenly divided between rural and urban areas. Due to limited financial resources for capital development programs and to the limited administrative capacity of most municipal governments, particularly in secondary cities and smaller urban centers, the cities are unable to accommodate adequately the demands for urban services of the rapidly expanding population. Nor has the production by both the public and private sectors of minimum standard urban shelter come even close to satisfying this rapid urban population growth.

### B. National Housing Deficit

According to GOC's National Housing Plan 1979-2000, the accumulated backlog of substandard units was estimated at 560,000 in 1979. In order to bring the existing backlog of substandard units up to minimum acceptable levels (secure tenure, access to water and sanitary services) by the end of this century, some 28,000 existing units a year must be upgraded. In addition, 52,000 new housing units must be built every year (21,000 urban, 31,000 rural) to accommodate the growing population, a combined total of 80,000 housing solutions a year. Current production levels of the formal sector when compared to the need derived from new household formation in urban areas alone indicate that the number of substandard urban units may have grown by as much as 13,800 units in 1981. Of 21,800 housing units required, just 37%, or roughly 8,000, were actually provided.

### C. Family Size and Structure

Based on surveys carried out in conjunction with the Urban Poverty in Guatemala study, the number of persons in the typical urban poor family will vary widely depending on level of education, income strata, geographic location, personal family circumstances, etc. The minimum number of persons per household (urban poor) is estimated to be 4.5 in the higher income deciles

(35-50 percentile) and 5.7-6.2 persons in the lower (0-35 percentile). Demographic figures for other urban areas outside Guatemala City suggest these persons per household are approximately .5-1.0 persons higher.

It has been found that most of Guatemala's urban poor include a couple, the head-of-households children and often relatives such as grandparents or grandchildren, aunts and uncles. The "extended" family structure is particularly common outside the metropolitan area.

#### D. Access to Suitable Housing

The fact that Guatemala's urban population centers are growing much faster than the rest of the country and land values and construction costs exceed the growth of real personal income, the urban poor are finding it more difficult to obtain suitable shelter accommodations. Despite the occurrence of squatting immediately following the 1976 earthquake, the effect of public policy and difficult topography in the capital city have maintained squatter movements to moderate levels. Thus, new households are forced to choose between the alternative of "doubling-up" or moving to the periphery of the metropolitan area (10-15 miles from the central downtown).

The problems of housing access to the poor are less severe in other urban centers, which have not yet experienced the pressures of rapid population growth similar to Guatemala City. Vacant lands are readily available close-in and at reasonable prices.

The physical quality of Guatemala's housing stock has suffered from the changing conditions that lower income people must face in finding a place to live in their urban environments. In Guatemala City, the downtown rooming houses or tenements (palomares) have continued to exist in their overcrowded and deteriorating conditions. Typically, whole families occupy one room. In the outlying squatter settlements (tugurios) most families have two or three rooms and some have even more physical space. Many houses do not have kitchens. Demands for the limited amount of living space have not allowed an area to be reserved for preparation of food. Under these circumstances, a hole is dug in the earthen floor to cook over an open fire, using wood.

Before the 1976 earthquake, the majority of all centrally located and peripheral homes were constructed of adobe. Since this period, the urban poor living in outlying settlements are using concrete blocks as the referred building material. However, families living in the marginal tugurios use predominantly trash and discarded materials used lumber, old tin-sheets, cardboard and sticks. In other urban areas the use of particular building materials may vary somewhat depending upon the availability of locally made brick and if earthquake hazards preclude the use of adobe.

#### E. Availability and Quality of Basic Services

In Guatemala the provision of water and sewerage services is a municipal responsibility. However, Guatemala City has the only municipal

water company (EMPAGUA). Other administrative arrangements exist in other municipalities such as a separate water department (Quezaltenango), a combined private water company and water department (Escuintla), a water commission (Tecpan), and in San Marcos the municipal treasurer is responsible. GCG's Municipal Development Agency (INFOM) is charged to plan, finance and construct municipal public works and to offer related technical assistance in administrative, financial and operational/ maintenance fields to the municipalities.

The level of access to piped water and sewer services to Guatemala's total urban population in 1977 was not intolerable. Approximately 45% of the population had direct connections to these services, while another 41% had reasonable access. In Guatemala City, EMPAGUA meets roughly 50% of the demand in the capital area. Residents living outside its current service area must rely on private wells or purchase water from trucks and use on-site sewage disposal systems such as letrines, septic tanks or absorption pits. Sufficient sources of water supply exist in meeting current user needs plus projected new demands over the next 2-3 years, depending upon particular geographic constraints. Discontinuity of services frequently occurs in parts of the system due to power failures, broken transmission mains, faulty equipment, etc. These disruptions of services can and do adversely affect the quality of drinking water. Wastewater treatment is largely non-existent, even in Guatemala City. Domestic raw sewage is discharged into nearby rivers and consequently, levels of contamination are quite high in most waterways near urban population centers. The above conditions are similar, if not worse, in other urban centers outside the metropolitan area.

II. ANALYSIS OF POTENTIAL ENVIRONMENTAL IMPACTS AND ASSESSMENT OF THE SIGNIFICANCE

A. Critical Areas of Potential Environmental Concern

In the absence of predetermined project sites, development plans, housing mixes, construction specifications and financial affordability analyses at this stage of the proposed shelter program's evolution, a generic environmental evaluation was performed on the basis of the following inputs: 1) the user's physical, social and economic needs and preferences; 2) the occupancy aspects of owning one of the proposed three basic types of shelter solutions and residing in a housing project; 3) the project development methodology and environmental design criteria used by the proposed implementing and review agencies; 4) prevailing construction and project supervision practices; and 5) GOG administrative constraints involving inter-institutional coordination and budgetary programming.

Based upon the above-mentioned parameters, the following areas have been identified as critical environmental concerns warranting detailed consideration because of their potential adverse environmental implications.

1. Existing Deficiencies in the Site Selection Criteria of Proposed Implementing Agencies;
2. Lack of Defined Environmental Design Criteria and Related Field Practices to be Used in Project Construction to Eliminate or Minimize Problems of Natural Hazards and/or Physical Constraints of the Site;
3. Lack of Policies and Standards Governing the Application and Enforcement of Existing Environmental Laws;
4. Operation and Maintenance Considerations in the Use of On-Site Water and Sewerage Treatment Facilities;
5. Inter-Institutional Cooperation and Coordinated Planning and Financial Programming in Support of Low-Cost Housing Projects.

B. Assessment of Probable Adverse Significant Environmental Impacts of the Identified Critical Areas of Concern

1. Existing Deficiencies in the Site Selection Criteria of Proposed Implementing Agencies.

The existing site selection criteria of EANVI, BANTESA, FENACOVI, and FHA are reasonably well defined and comprehensive in scope. However, they are not specifically sensitive to the particular needs of low-income groups; i.e., proximity to public transportation, availability and capacity of existing schools to absorb school children generated by proposed low-cost housing projects, financial budgeting and programming inputs from

important GOG ministries responsible for the provision of basic infrastructure services and community facilities, etc. Consideration of these on-site and off-site factors can have a decisive effect on the feasibility of projects, marketability and acceptability of the projects by the intended beneficiaries and their short- and long-term liveability qualities.

The above-mentioned agencies are cognizant of these deficiencies in their site evaluation criteria and are receptive to the idea of receiving short-term technical assistance (TA) to improve their project planning and evaluation capabilities. This type of TA is contemplated within the scope of the proposed shelter programs.

2. Lack of Defined Environmental Design Criteria and Related Field Practices to be Used in Project Construction to Eliminate or Minimize Problems of Natural Hazards and or Physical Constraints of the Site.

Project planners and designers do not have at their disposal any form of a project design methodology or set of planning criteria to guide them in determining the proposed utilization (land use) of a site. In addition, when the final design plans are completed no preparations are made to guide the execution of the project to minimize or eliminate the occurrence of problems such as erosion of steep slopes, excessive sediment loading into shallow streambeds creating potential flooding dangers, landslides due to improper control of surface drainage, etc.

While these considerations should be integrated into project planning and design processes, the responsibilities of the design professional should not stop upon completion and approval of final plans. Discussions with field personnel and preparation of explicit environmental control measures through each stage of the project's implementation should be carried out and monitored as to their effectiveness. The lessons from these field experiences should then be reevaluated and modified where necessary, in the planning of new projects.

It is recommended that short-term technical assistance be offered to GOG implementing institutions involved in the area of environmental site design with particular emphasis in the area of control of storm drainage and related temporary/permanent erosion and sedimentation control measures. While the proposed projects are not contemplated to be large in size (averaging between 100-300 units) nor cause any significant adverse impacts because of their wide geographic distribution, the benefits of this TA may be measured in the minimization of construction delays related to damaged infrastructure systems, time lost because of the need to repair eroded slopes or to remove sediment from construction ditches or streambeds, etc.

3. Lack of Policies and Standards Governing the Application and Enforcement of Existing Environmental Sanitation Laws.

Numerous laws and decrees have been legislated by Guatemala's National Congress, however, no uniform set of policies and standards has been formulated to implement specifically selected provisions of the Health Code governing the regulation of wastewater discharged into surface or sub-surface waters (Articles 97, 99, 101, 106). Enforcement of these water pollution control regulations does not exist because of: a) the lack of commitment on the part of the agencies with jurisdiction; b) absence of effluent policies and standards; and c) lack of financial resources to train and equip enforcement staffs.

Indicative of the effectiveness of these environmental health provisions, Guatemala City wastewater discharges are the single largest source of water pollution in the country. It does not have an active pollution control program. While there is an apparent concern over this state of affairs, the only major watershed where GOG is attempting to control wastewater discharges is in the Lake Atitlan area. Outside of this area, the individual municipalities are responsible for regulating wastewater discharges.

Based upon current practices of BANVI, BANDESA, and FENACOVI, project sites are being selected in close proximity to existing municipal water and sewage collection systems to take advantage of the economies to be gained from using these public facilities. Where it is not possible to secure access to public facilities, independent on-site sewage treatment (primary level) facilities are being built to reduce the level of contamination in receiving water bodies. Three basic types of treatment facilities are being built septic tanks, absorption pits and imhoff plants. In cases where houses are being financed on single lot, use of letrinas are common.

Specific decisions on what level of pollution control will be required in the proposed shelter program will be determined on a case-by-case basis. The question will be carefully considered in each of the sequential steps of project development - site selection, pre-feasibility study and project design. As a basic rule, A.I.D. will expect the law of common sense to rule that where there is no contamination or a commitment on the part of GOG or a municipality to control levels of water contamination, primary treatment as a minimum will be provided to all sanitary wastewaters. In other circumstances where there is no pollution control program, receiving streams are already badly contaminated, and where additional untreated discharges will not significantly effect existing water quality conditions then, no treatment facilities will be required.

4. Operation and Maintenance Considerations in the Use of On-Site Water and Sewerage Treatment Facilities.

When housing projects are located outside the existing service areas of municipal water and sewerage collection systems, it will be necessary to construct, operate and maintain their physical infrastructure systems in a

manner that will insure an adequate level of service to their users and an acceptable level of health protection. Once constructed, these infrastructure systems may be conveyed to either municipal authorities or remain in the ownership of housing cooperatives or community associations to be operated and maintained. The design standards and final plan approval authority rests with municipal authorities. In cases where technical expertise does not exist with municipal governments, INFOM provides technical assistance and design consultation to them.

Because of peculiarities of Guatemala's tax laws, municipalities are not permitted to levy a property tax on property owners with house mortgages. For this reason, plus the financial and administrative costs involved with the O&M of infrastructure facilities, some municipalities outside Guatemala City are reluctant to accept these systems. Under these circumstances, the housing cooperatives will retain ownership of these systems. Currently, BANDESA, BANVI and FENACOVÍ are providing technical training and O&M manuals to the leadership of the housing cooperatives they serve. Similarly, monthly mortgage payments are structured to include a portion sufficient to cover O&M costs. Given the administrative, financial and technical limitations of Guatemala's municipal governments, in the short-run the alternative of self-management of these facilities by the cooperative/community associations members is the preferred alternative.

5. Inter-Institutional Cooperation and Coordinated Planning and Financial Programming in Support of Low-Cost Housing Projects.

In the absence of a defined national low-cost housing strategy at the level of the metropolitan area and provincial urban centers, the efforts of public and private sector groups to plan and construct shelter solutions for the urban poor is carried out in a disjointed manner. Coordinated planning of projects in designated development zones where essential supporting community facilities and services have been committed and are being budgeted by GOG agencies and municipal authorities simply does not exist. The net effect of these administrative/managerial deficiencies is that the financial burden of constructing off-site infrastructure improvements to enable the technical feasibility of some housing projects ultimately becomes a burden that must be born by the urban poor. The high cost of urbanization implies that less of a house can be financed with their limited financial resources.

While these are not political conditions created by the proposed HG program, they are practical realities that will have to be confronted in the process of program execution. Cooperation and coordinated planning between the Central Bank of Guatemala and municipalities where sub-projects are to be constructed will result in more ecologically sound urban growth patterns maximize the utilization of existing community facilities and services, minimize project costs, and reduce potential beneficiary hardships because of lack of or limited access to public transportation, schools, health care, etc.

V. THRESHOLD RECOMMENDATION

In addition to the two defined areas of technical assistance contemplated in the PID, it is recommended that in the development of the PP specific steps be taken to expand the scope of TA to encompass special environmental design standards and practices as well as specific training in stormwater management techniques. To the extent possible, the other programmatic areas of environmental concern previously discussed should be incorporated into the project design at the time of PP preparation. Given the outstanding housing deficit that exists throughout Guatemala, the denial of the proposed housing program would have more of a significant adverse effect on the lives and existing physical quality of the urban environment than if the program proceeded forward without any further advancement or resolution of the critical concerns previously discussed. It is hoped that the leverage or influence at the proposed \$20 million HG loan and \$20 million GOG resources will be used to focus attention on the environmental policy issues raised in this IEE in order to advance the long-term improvement of Guatemala's environmental quality.

On the basis of the foregoing environmental analysis and evaluation of potential significant adverse impacts, it is concluded that the proposed shelter program will not significantly impact the physical environment. Therefore, environmental clearance should be granted to this program.

SUGGESTED MINIMUM SUBDIVISION  
AND URBANIZATION STANDARDS

SUBDIVISION CONTROLS:

1. Minimum Size Lot : 72-90 sq. meters
2. Minimum Lot Width : 5 meters
3. Minimum Length of Lot : 12 meters
4. Minimum Building Setback : 1.5-2 meters
5. Public Land Dedications : Allow flexibility in their application, particularly with reforestation and school facility dedication

URBANIZATION CONTROLS:

1. Minimum Street Width:
  - a. Main access roads : 10 meters
  - b. Interior Collector Streets: : 7-8 meters
  - c. Local Streets : 5 meters
2. Minimum Street Pavement:

In areas with less than 5-7% slope allow use of 4" select material compacted.
3. Walkways:
  - a. Sidewalks of one meter stone or concrete
  - b. Sidewalk and drainage combination : A 1.25 meter concrete sidewalk with an open ditch of stone, block or brick masonry on one side.
  - c. Allow use of pedestrian walkways with direct house frontage as principal access to local streets.

4. Sanitary Sewer System:

- a. House connection with 4" pipe.
- b. Minimum 6" pipe in initial streets.
- c. Minimum depth of installation of 1.0 meter in open areas and 1.20-1.50 meters on streets.
- d. Double house connections to register box.
- e. Distance between manholes of 135-150 meters.

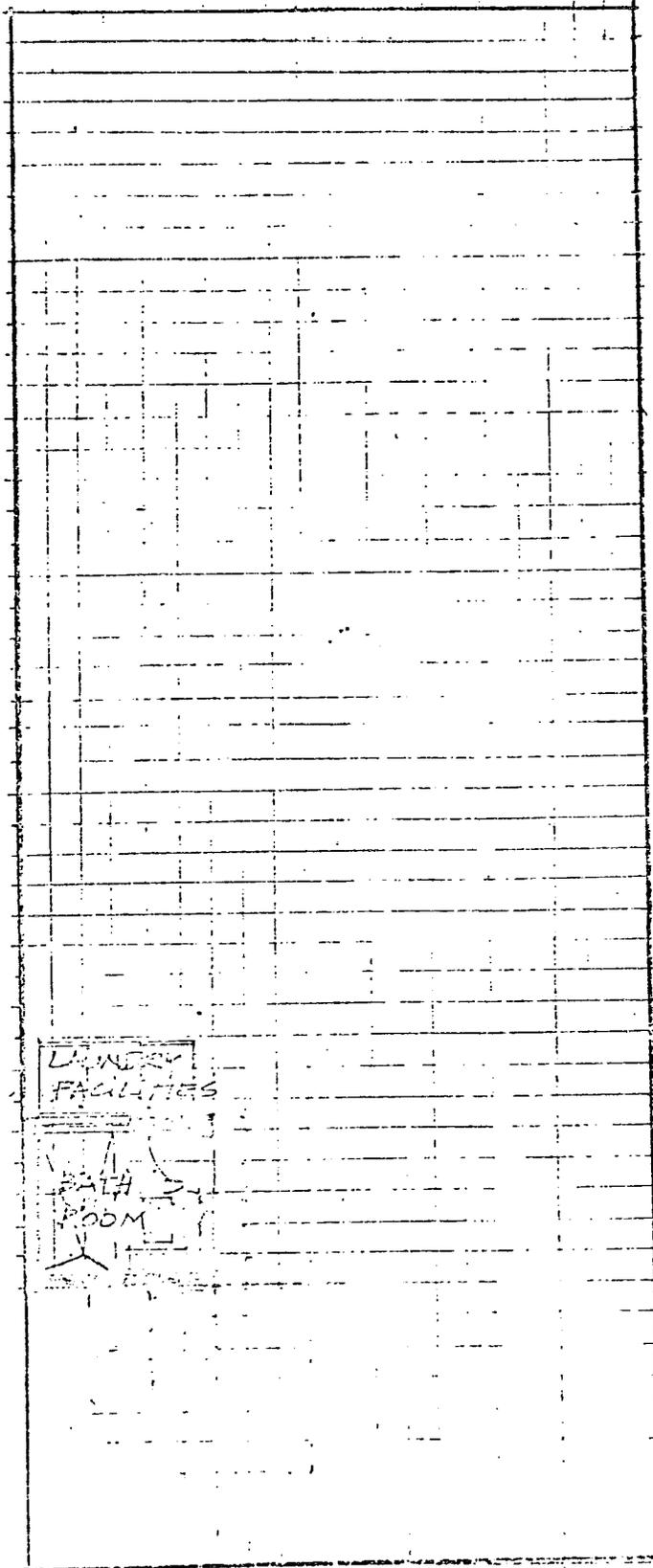
5. Water Distribution System

- a. House connection with 1/2" pipe.
- b. Accept open distribution system.
- c. Minimum depth of installation 0.60 meters under sidewalks and 0.80 under streets.
- d. Minimize use of fire hydrants and consider use of standpipes for fire hose connections.
- e. Consider reducing water consumption design criteria to a minimum of 40 gal. per day per person.

6. Storm Drainage System:

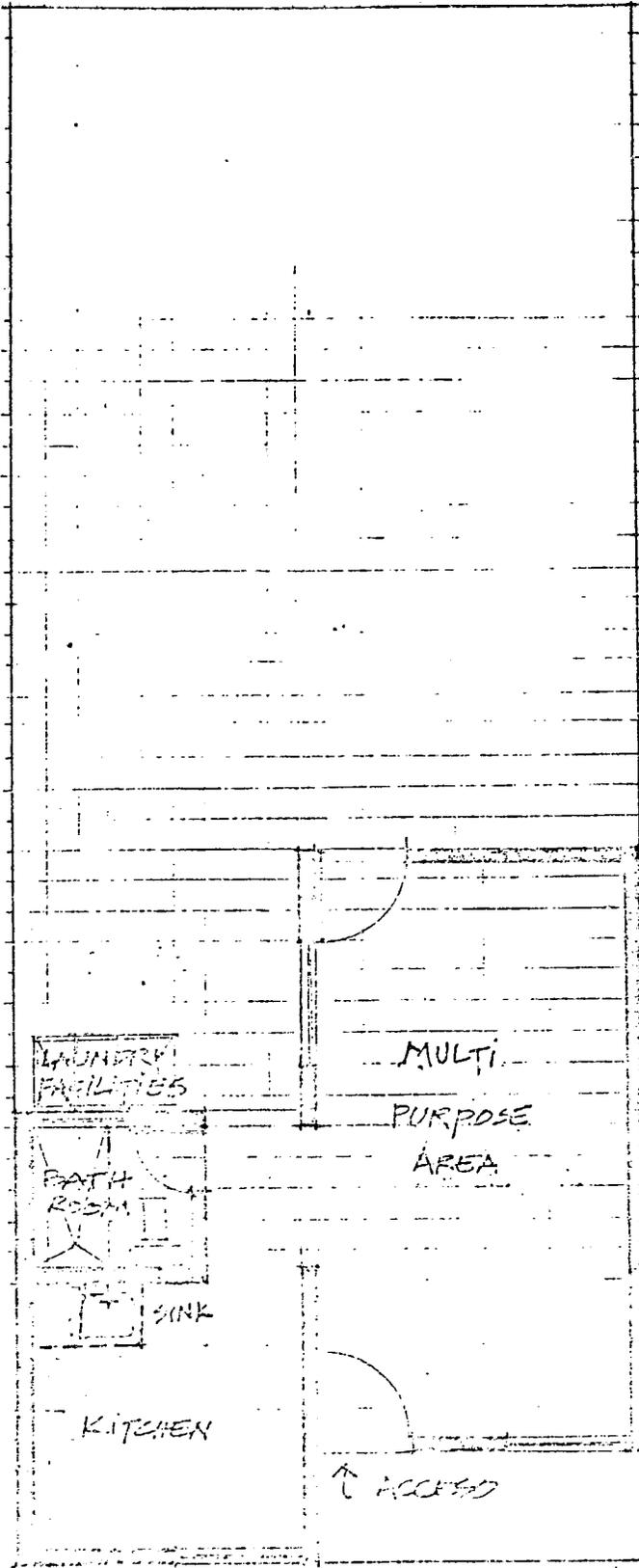
- a. Allow use of open paved ditches in place of closed piped systems.

LEVEL I - SERVICED LOT/SANITARY CORE



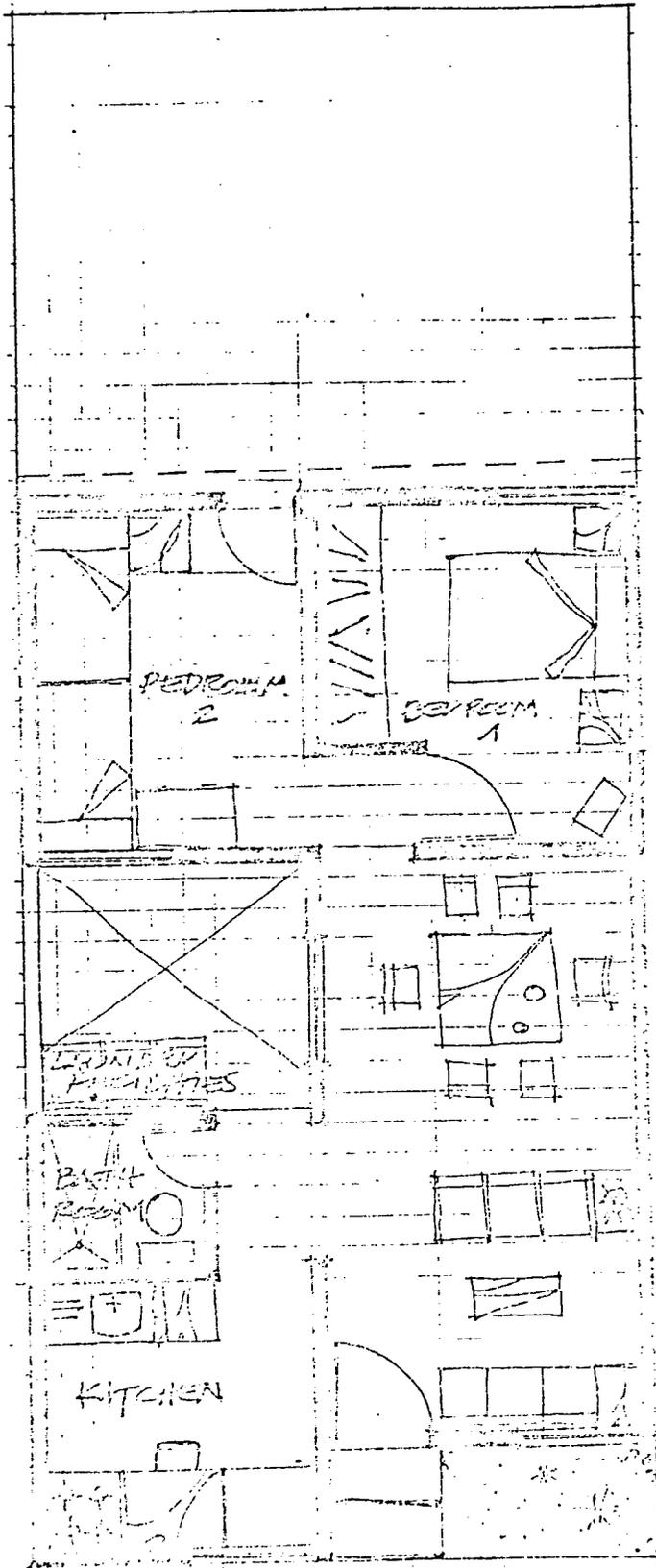
**BEST AVAILABLE DOCUMENT**

LEVEL II - SERVICED LOT/SANITARY CORE  
WITH 30 M<sup>2</sup> CONSTRUCTED AREA



ESCALA 1:75

LEVEL III - SERVICED LOT/SANITARY CORE  
WITH 50M<sup>2</sup> CONSTRUCTED AREA



DEMAND STUDY DATA

ANNEX IV

TABLE I

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TENURE OF CURRENT HOUSE

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<u>Tenure</u>	<u>Guatemala City</u>		<u>Secondary Cities</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Owners	218	29	195	57.5
Rentors	449	59	112	33.
Use house free of charge	<u>92</u>	<u>12</u>	<u>32</u>	<u>9.5</u>
TOTALS	795	100	389	100

ANNEX IV

TABLE II

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MONTHLY PAYMENTS FOR CURRENT HOUSING

IN GUATEMALA CITY

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<u>Type of Neighborhood</u>	<u>Monthly Payment</u>				
	<u>0</u>	<u>1-25</u>	<u>26-50</u>	<u>51-75</u>	<u>76-100</u>
	<u>¢</u>	<u>¢</u>	<u>¢</u>	<u>¢</u>	<u>¢</u>
Turgurio	58	23	9	4	6
Palomar	4	31	45	12.5	7
Deteriorated Central Area	41	5	18	19	17
Deteriorated Periphery	45	23.5	24	3	4

ANNEX IV

TABLE III

<u>Current Payment</u>	<u>% Willing To Pay More Than Currently Paying</u>	
	<u>Guatemala City</u>	<u>Secondary City</u>
	<u>%</u>	<u>%</u>
00	93	95
1-25	65	36
26-50	33	15
51-75	40	25
76-100	69	38.5

ANNEX IV

TABLE IV

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AMOUNT FAMILIES COULD PAY FOR A NEW HOUSE  
IN GUATEMALA CITY

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<u>Current</u> <u>Payment</u>	<u>Could Pay</u>					
	<u>0</u>	<u>1-25</u>	<u>26-50</u>	<u>51-75</u>	<u>76-100</u>	<u>100+</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
00	7	9	27	5	5	32
1-25	1	33	49	5	2	9
26-50	0	9	58	16	7	10
51-75	1	1	27	30	28	12
76-100	2	5	16	9	22	47

ANNEX IV

TABLE V

REASONS FOR NON-ACCEPTANCE OF URBANIZED LOT  
IN GUATEMALA CITY, BY TYPE OF NEIGHBORHOOD

<u>Type of Neighborhood</u>	<u>Reasons for Non-Acceptance</u>			
	<u>Too Expensive</u>	<u>Dislikes Solution</u>	<u>Does Not Solve housing problem</u>	<u>Other</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Turgurio	62	5	26	8
Palomar	26	13	56	5
Deteriorated Central Area	6.5	30	36	28
Deteriorated Periphery	24	29.5	25	21.5

ANNEX IV

TABLE VI

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REASONS FOR NON-ACCEPTANCE OF CORE UNIT  
IN GUATEMALA CITY, BY TYPE OF NEIGHBORHOOD

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Type of Neighborhood	<u>Reasons for Non-Acceptance</u>			
	<u>Too Expensive</u> %	<u>Dislikes Solution</u> %	<u>Does Not Solve Housing problem</u> %	<u>Other</u> %
Turgurio	89	2	5	5
Palomar	84	4	6	6
Deteriorated Central Area	45	12	6.5	31
Deteriorated Periphery	80	1	0	17

ANNEX IV

TABLE VII

REASONS FOR NON-ACCEPTANCE OF COMPLETE HOUSE  
IN GUATEMALA CITY, BY TYPE OF NEIGHBORHOOD

Type of Neighborhood	Reasons for Non-Acceptance			
	Too Expensive %	Dislikes Solution %	Does Not Solve Housing problem %	Other %
Turgurio	98	2	0	0
Palomar	90	5	0	5
Deteriorated Central Area	80	0	0	17
Deteriorated Periphery	90	.5	0	9.5

ANNEX VI-A

THE SAVINGS MARKET

In today's market, the most important source of resources for the banking sector is the savings account, as is shown below.

In Thousands of Dollars

Deposits in

Checking

Accounts	304,767	28.5	307,248	25.6	313,215	22.8	218.0
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Savings

Accounts	610,627	57.2	722,979	60.1	916,579	66.6	50.1
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Fixed

Deposits	153,251	14.3	172,197	14.3	146,326	10.6	( 4.5
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Total	1,068,645	100.0	1,202,424	100.0	1,376,120	100.0	28.8
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The table above is very revealing:

- a. Based on the performance shown, the public obviously

prefers to have their resources earning interest instead of in checking accounts. Thus, site deposits move from 26.5% of the total in 1979 to a total of 22.6% in 1981 which highlights the rate of interest as a motivating factor in the present situation.

b. Perhaps the most important point illustrated by the table is the relation between savings and fixed deposits. In Guatemala, it is not necessary to distinguish between one and the other as it relates to term and interest since these are annuled due to the fact that in the Guatemalan market one can obtain the same interest for savings accounts as for term accounts. Given this circumstance, the savings account becomes the more attractive financial mechanism of the two as it combines liquidity with high income.

c. Given the inability to separate savings from fixed deposits, it is difficult to detect the existence of the mortgage housing institutions' typical market for savings mobilization, i.e., the massive potential of small savers accounts.

The preliminary indices show that the banks have not promoted small savings accounts but rather have sought the large accounts ignoring the small saver due to their considering the handling expensive.

This market is potentially very important regarding the future financing of housing. At the present time it is not being exploited.

Propensity to Save

With a view towards having a clearer vision of the behavior and potential of the present market, the table below relates internal gross product with the computation of savings and fixed term accounts in the private banking sector as this is a factor to be considered in the future.

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<u>Thousands</u> <u>of Quetzales</u>	<u>Gross Internal</u> <u>Product</u> <u>1/</u>	<u>Savings and</u> <u>Fixed Term</u>	<u>%</u>
1979	6,903,004	763,878	11.07
1980	7,879,373	895,176	11.40
1981	8,745,690	1,062,905	12.00

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1/ Estimates based on Banco de Guatemala data.

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In the period under consideration, 1979-1981, the percentage participation has increased by 8.4%, which demonstrates that the

savings habit is maintained, along with continued confidence in the financial system. Nevertheless, given the reigning recession which augurs an eventual net increase in the gross internal product, it is save to say that the current savings market will also grow. This offers increased possibility of orienting increased resources towards the housing sector.

The areas which appear to represent the greatest potential regarding the attraction and mobilization of savings resources are:

a. Strategy for Attracting Resources from the Small Saver

This market, whose potential has been amply demonstrated by the history of the savings and loan movement in Latin America, has to date in Guatemala not been exploited. Simultaneous with the incorporation of the socio-economic class below the median into the mortgage system of the approved entities, one should create or mount a massive promotional campaign to stimulate savings, taking advantage of the broad experience which already exists in Latin America with this group. It would appear that to date the private sector banks have ignored the potential magnitude of this market.

b. Institutional Funds

The second route for savings mobilization which appears viable is that represented by pension funds, especially those constituted in technical reserves.

Presently the IGSS (Instituto Guatemalteco de Seguridad Social - Guatemalan Social Security Institute) has important sums deposited with the local banks. A permanent, guaranteed and continuous flow of funds for the long-term financing of housing could be developed via the purchase by IGSS of mortgage certificates. A similar operation could be performed with other similar institutional funds.

It would appear that what has been demonstrated is not so much the lack of funds, but rather, the lack of a sectorial strategy for the mobilization of funds to be directed towards the long-term financing of housing.

The dimensioning of the market potential, the selection or design of the instruments most apt for mobilizing it and the required institutional support constitute longer range, but nonetheless, priority objectives for the technical assistance programs planned in connection with the implementation of this program.

ANNEX VI-B

CASH FLOW PROJECTIONS

The assumption employed in the preparation of this cash flow are the following:

a. The term of the loan is 25 years, with a 10-year grace period. For effects of this calculation, identical assumptions have been made regarding the terms of the GOG counterpart.

b. Interest rate to the Bank of Guatemala is 8%, to the beneficiary at 13% (including the 1% for administration and 1% for FHA insurance).

c. The bank of Guatemala will receive a 20% initial drawdown of available HG funds to commence the project.

d. Disbursement period. Against mortgage certificates or bonds will require 6 semesters commencing June 30, 1983.

e. During the grace period, amortizations will be immediately reinvested in similar projects. Because of the delay involved in receipt of payments and their placement, the efficiency of the portfolio is calculated at 11%.

f. For the period of repayment, it has been conservatively projected that the portfolio will be 100% invested in the project and will be amortized in 15 years, to wit, the repayment period fixed.

g. A 3% bank closing cost fee.

Disbursement Program

01-01-83	Advance	4,000,000
06-30-83	Discount Mortgages	3,300,000
12-31-83	Discount Mortgages	3,300,000
06-30-84	Discount Mortgages	3,300,000
12-31-84	Discount Mortgages	3,300,000
06-30-85	Discount Mortgages	3,300,000
	Amortization of the Advance	(2,200,000)
12-31-85	Discount Mortgages	3,500,000
	Amortization of the Advance	(2,000,000)
	TOTAL	<u>20,000,000</u>

GRACE PERIOD

CASH FLOW AND RESULTS

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>TOTAL</u>
Interest Generated	511,500	1,347,500	1,963,500	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	15,222,500
Closing Costs	198,000	198,000	204,000	---	---	---	---	---	---	---	600,000
Total	709,500	1,545,500	2,167,500	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	19,822,500
Interest Paid	372,000	98,000	1,460,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000	14,012,000
Balance Available	337,500	565,500	707,500	600,000	600,000	600,000	600,000	600,000	600,000	600,000	5,810,500

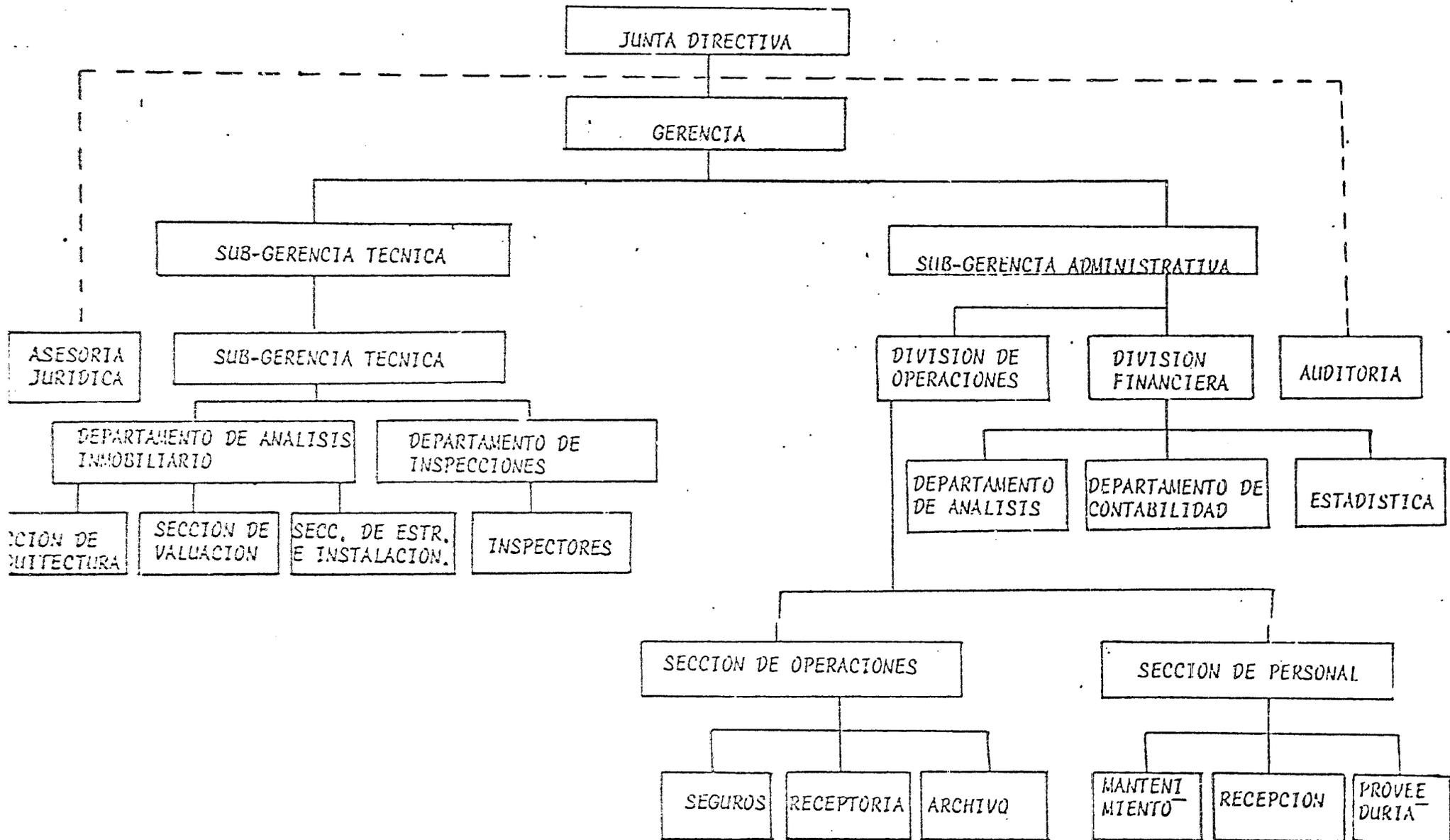
NOTE: During this period, the amortizations available for reinvestment will be \$3,233,730, which is the equivalent of 16% of the total, with the corresponding impact on the number of housing solutions produced.

AMORTIZATION PERIOD

Cash Flow and Results

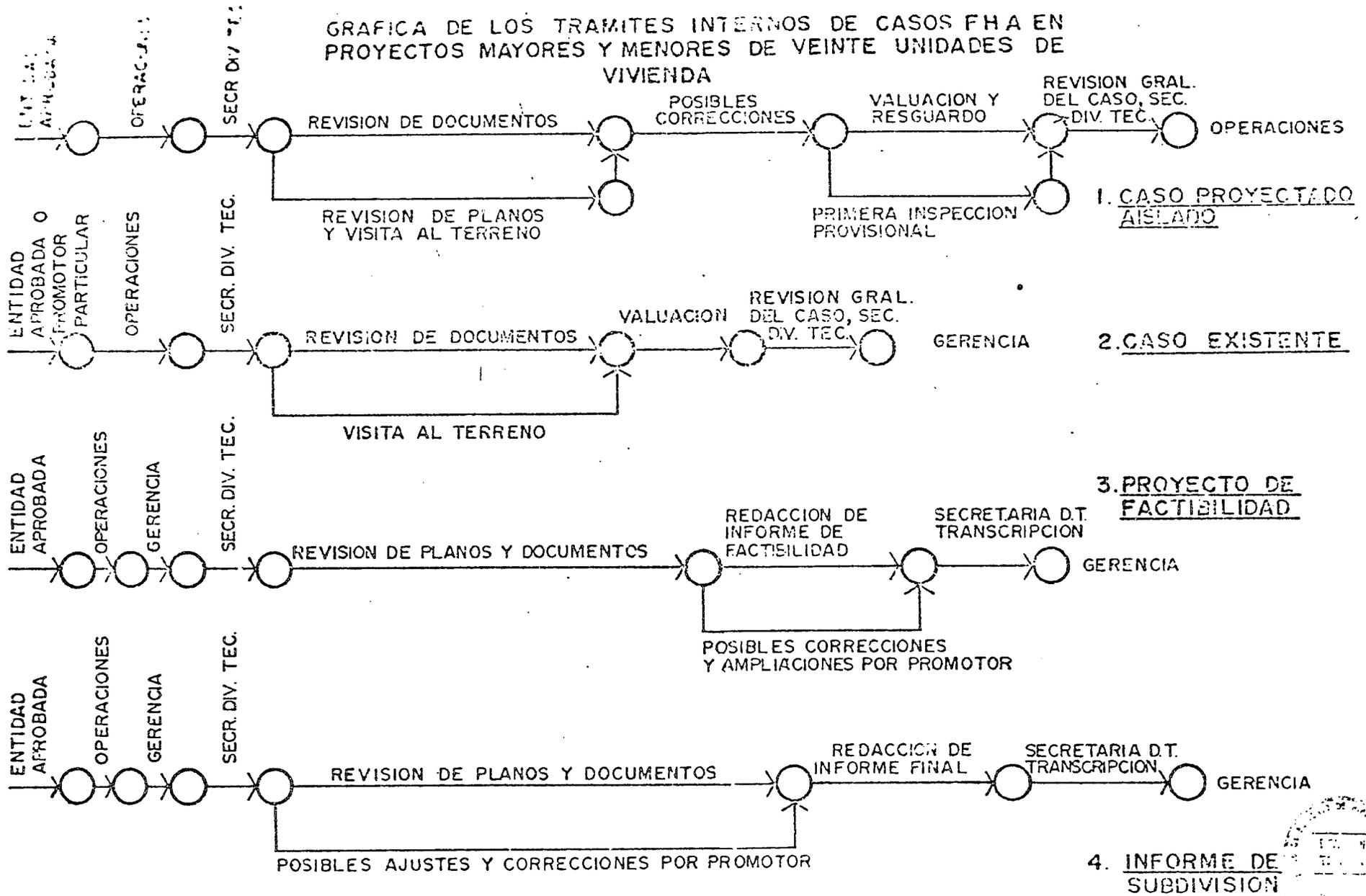
<u>Year</u>	<u>FIXED PAYMENT</u>		<u>BREAKDOWN OF INTEREST RATE</u>		
	<u>Amorti- zation</u>	<u>Interest Earned</u>	<u>To Banco de Guatemala</u>	<u>FHA Ins. Premium</u>	<u>Interest to Appr. Entity</u>
1993	463,580	2,573,020	1,583,397	197,925	791,698
1994	527,560	2,509,040	1,544,025	193,003	772,012
1995	600,390	2,436,210	1,499,206	187,400	749,604
1996	683,260	2,353,340	1,448,209	181,027	724,104
1997	777,570	2,259,030	1,390,172	173,772	695,086
1998	884,900	2,151,700	1,324,123	165,515	662,062
1999	1,007,050	2,029,550	1,248,954	156,119	624,477
2000	1,146,050	1,890,550	1,163,415	145,427	581,708
2001	1,304,240	1,732,360	1,066,068	133,258	533,034
2002	1,484,280	1,552,320	952,274	122,409	477,637
2003	1,689,250	1,347,450	829,200	103,650	414,600
2004	1,922,300	1,114,300	690,866	98,573	324,861
2005	2,187,650	848,950	522,431	65,304	261,215
2006	2,489,620	546,980	336,603	42,075	168,302
2007	2,832,400	204,200	125,661	15,708	62,831
<b>TOTAL</b>	<b>20,000,000</b>	<b>25,548,460</b>	<b>15,724,604</b>	<b>1,981,165</b>	<b>7,842,691</b>
	13%		8%	1%	4%

INSTITUTO DE FOMENTO DE HIPOTECAS ASEGURADAS





GRAFICA DE LOS TRAMITES INTERNOS DE CASOS FHA EN PROYECTOS MAYORES Y MENORES DE VEINTE UNIDADES DE VIVIENDA



F.H.A. - BALANCE SITUATION AS OF December 31, 1981

	<u>1 9 7 9</u>			<u>1 9 8 0</u>			<u>1 9 8 1</u>		
	<u>Value</u>	<u>%</u>	<u>100</u>	<u>Value</u>	<u>%</u>	<u>A %</u>	<u>Value</u>	<u>%</u>	<u>A %</u>
<u>ASSETS</u>									
- Disponible	3,903,987		100	4,542,269	91.33	116	5,492,624	93.03	141
- Realizable	300,487		100	329,634	6.67	109	335,205	5.66	112
- Activos Varios	55,239		100	69,101	1.40	125	77,152	1.31	139
TOTAL	4,259,713		100	4,941,004	100.00	116	5,904,999	1.00	139
<u>LIABILITY</u>									
- Circulante									
- Exigible	22,398		100	2,888	0.06	13	10,741	0.18	48
- No Exigible	940,558		100	437,659	8.86	99	676,582	11.46	154
- Créditos Difer.	---		---	3,595	0.07	--	1,558	0.03	--
- Long-Term	---		---	---	--	--	--	--	--
- Internal Public Debt	---		---	---	--	--	100,100	1.70	--
- Capital, Reserve and Superavit	3,796,757		100	4,496,862	9.01	118	5,116,018	86.63	135
TOTAL	4,259,713			4,941,004	100.00	116	5,904,999	100.00	139

CUADRO DE EMISION DE SEGUROS DE HIPOTECA DURANTE LOS AÑOS 1962-1980



COMPARATIVE TABLE ON MORTGAGE INSURANCES  
ISSUED DURING 1980-1981  
BY APPROVED ENTITY

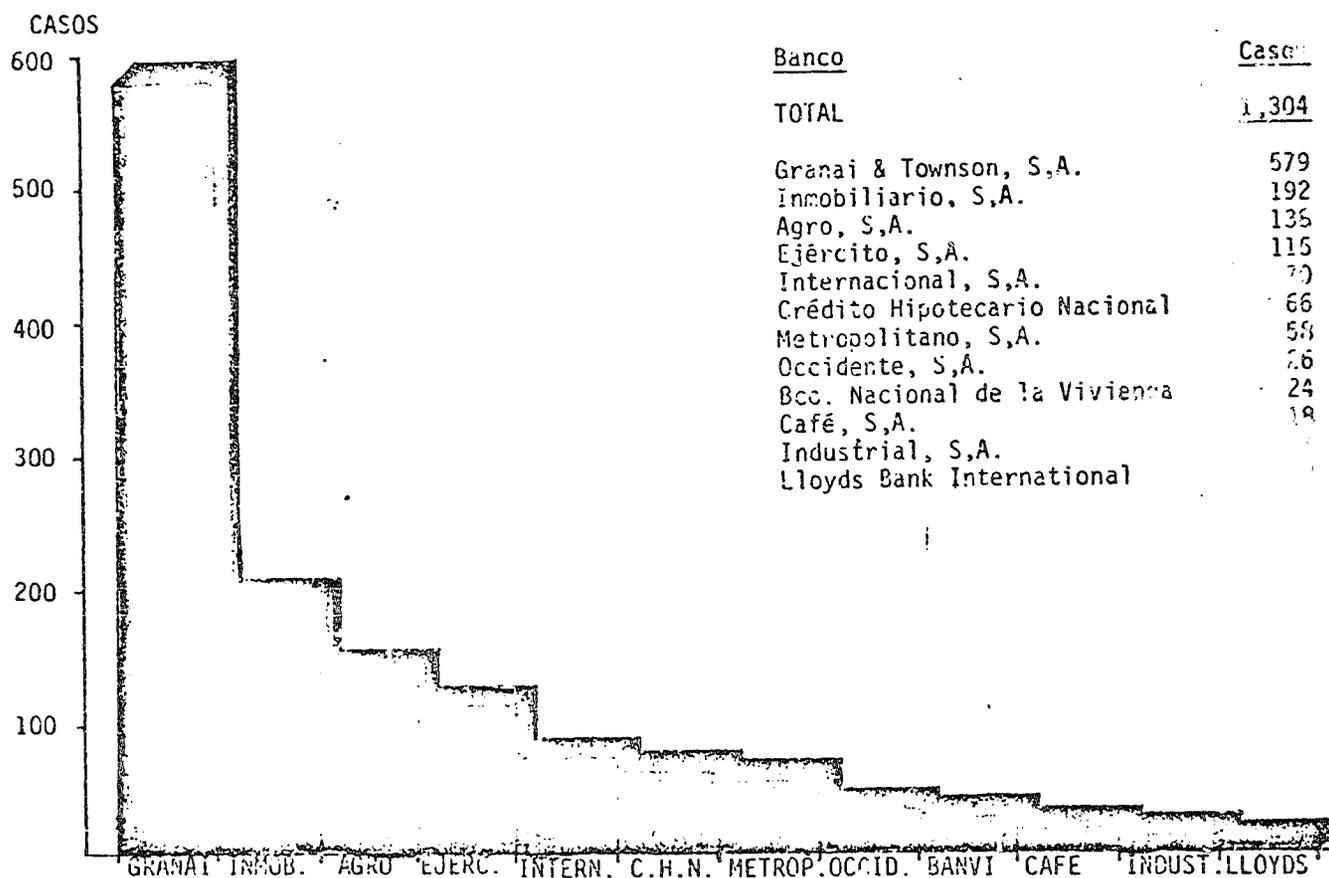
	CASES		AMOUNTS	
	<u>1980</u>	<u>1981</u>	<u>1980</u>	<u>1981</u>
TOTAL	<u>1,181</u>	<u>1,304</u>	<u>Q 27 094 900</u>	<u>Q 31 538 900</u>
Granai & Townson, S. A.	488	579	11,319,500	14,640,100
Inmobiliario, S. A.	227	192	4,184,600	3,824,900
Agro, S. A.	85	138	1,877,400	2,878,500
Ejército, S. A.	49	115	1,499,700	3,261,400
Internacional, S. A.	78	70	2,715,400	2,054,200
Crédito Hipotecario Nacional	63	66	1,369,500	1,358,400
Metropolitano, S. A.	58	58	1,525,600	1,349,000
Occidente, S. A.	11	26	317,700	605,600
BANVI	73	24	1,025,700	423,200
Café S. A.	1	18	31,000	493,000
Industrial, S. A.	35	11	796,400	305,600
Lloyds Bank International	12	7	382,400	345,000
Cruz Azul, S. A.	1	--	50,000	--

MORTGAGE INSURANCES ISSUED DURING 1981  
BY APPROVED ENTITY

	<u>No.</u> <u>Cases</u>	<u>Area in</u> <u>Meters</u>	<u>Meters</u> <u>Constructed</u>	<u>Sale</u> <u>Price in</u> <u>Quetzales</u>	<u>Initial In-</u> <u>vestment by</u> <u>Buyer in</u> <u>Quetzales</u>	
Granai & Townson, S. A.	579	110,076.87	54,555.94	18,146,820.50	3,506,720.50	14,640,100
Inmobiliario, S. A.	192	37,669.836	19,249.60	4,974,182.48	1,149,282.48	3,824,900
Agro, S. A.	138	30,758.62	15,694.26	3,962,917.36	1,084,417.36	2,878,500
Ejército, S. A.	115	28,536.7313	15,919.26	4,780,119.20	1,518,719.20	3,261,400
Internacional, S. A.	70	16,576.73	9,043.15	2,806,080.69	751,880.69	2,054,200
Crédito Hipotecario Nacional	66	13,920.95	6,714.83	1,810,375.00	451,975.00	1,358,400
Metropolitano, S. A.	58	9,649.78	5,749.48	1,816,600.00	467,600.00	1,349,000
Occidente, S. A.	26	6,541.987	2,691.43	822,384.71	216,784.71	605,600
BANVI	24	6,977.30	2,200.88	597,972.66	174,772.66	423,200
Café, S. A.	18	1,808.560	1,808.75	615,055.00	122,055.00	493,000
Industrial, S. A.	11	2,041.58	1,310.53	422,446.60	116,846.60	305,600
Lloyds Bank International	7	697.10	1,177.84	521,100.00	176,100.00	345,000
<b>TOTAL</b>	<b><u>1,304</u></b>	<b><u>267,270.0443</u></b>	<b><u>136,115.95</u></b>	<b><u>41,276,054.20</u></b>	<b><u>9,737,154.20</u></b>	<b><u>31,538,900</u></b>

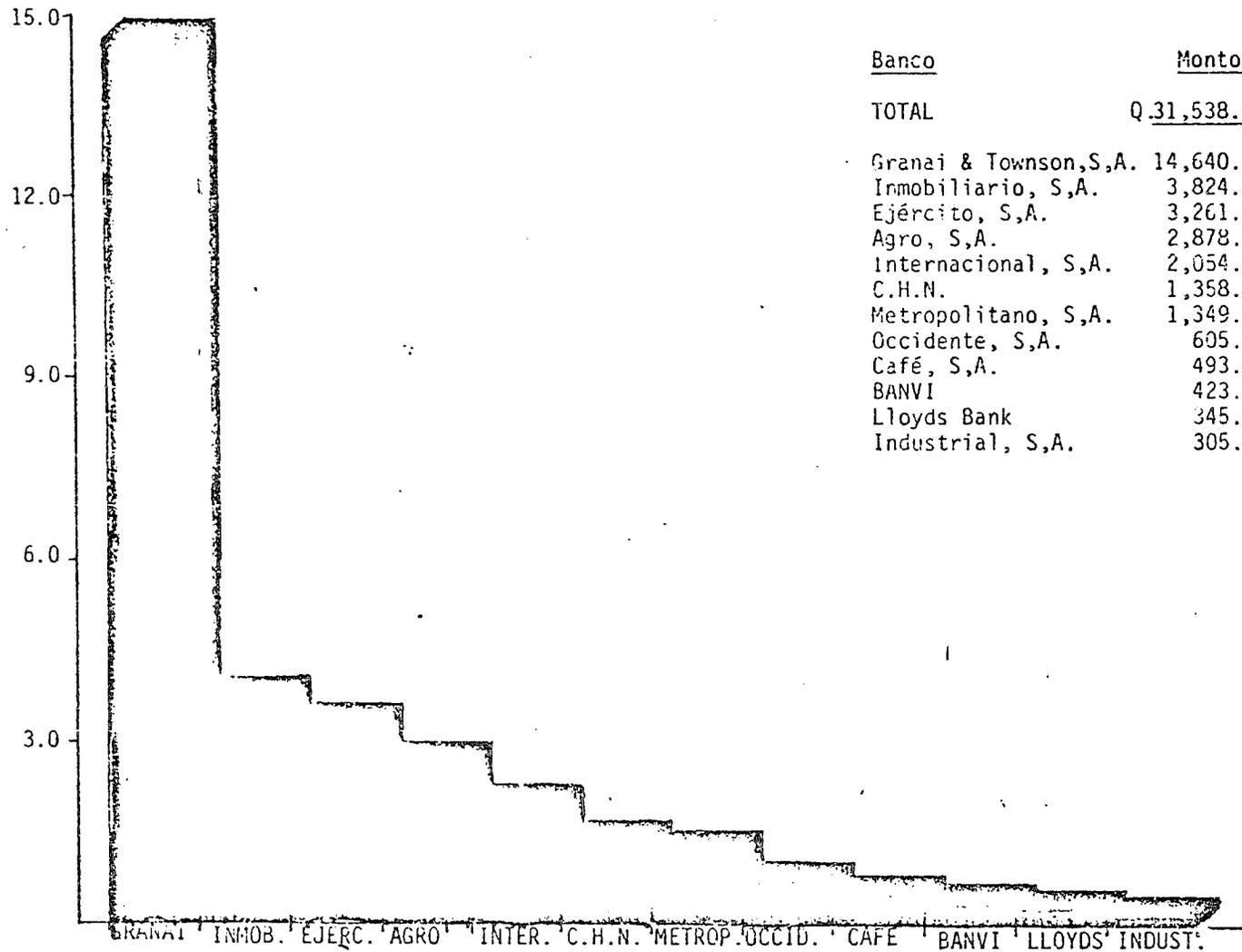
4/1/81

## CASOS DE SEGUROS DE HIPOTECA EMITIDOS DURANTE EL AÑO DE 1,981, POR ENTIDAD APROBADA



MONTOS DE SEGUROS DE HIPOTECA EMITIDOS DURANTE EL AÑO 1,981 POR ENTIDAD APROBADA

Miles



APPROVED ENTITIES

1. Banco Inmobiliario, S. A.
2. B. Granai & Townson, S. A.
3. Crédito Hipotecario Nacional de Guatemala
4. Lloyds Bank International Limited
5. Banco de Occidente, S. A.
6. Banco del Agro, S.A.
7. Banco del Ejército, S. A.
8. Banco de los Trabajadores, S. A.
9. Banco de America, Suc. Guatemala
10. Banco Internacional, S. A.
11. Banco Nacional de la Vivienda
12. Banco del Café, S. A.
13. Banco Metropolitano, S. A.
14. Banco Agrícola Mercantil
15. Banco Industrial, S. A.

CAPTACION DE RECURSOS E INVERSION EN VIVIENDA

BANK	<u>1 9 7 9</u>					<u>1 9 8 0</u>					<u>1 9 8 1</u>				
	<u>Savings</u>	<u>Fixed Term</u>	<u>Total</u>	<u>Mort. Credit</u>	<u>%</u>	<u>Savings</u>	<u>Fixed Term</u>	<u>Total</u>	<u>Mort. Credit</u>	<u>%</u>	<u>Savings</u>	<u>Fixed Term</u>	<u>Total</u>	<u>Mort. Credit</u>	<u>%</u>
<u>Private Banks</u>															
- De Occidente	62,455	6,206	68,661	5,797	8.44	85,548	10,511	96,059	3,955	4.12	110,470	10,857	121,327	1,959	1.53
- Agrícola Mercantil	67,749	4,975	72,724	---	--	72,584	8,863	81,447	---	--	86,620	7,224	93,844	1,612	1.72
- Del Agro	59,659	2	59,661	5,213	8.74	59,631	2	59,633	7,073	11.86	69,791	2	69,793	9,128	13.08
- Inmobiliario	73,113	25,338	38,451	14,256	14.48	74,767	30,133	104,300	18,695	17.82	67,515	25,392	92,907	3,244	3.49
- Granai & Townson	91,370	6,329	97,699	18,531	19	96,687	11,235	107,922	25,071	23.2	111,305	13,021	124,326	35,370	28.4
- Industrial	96,425	52,354	148,779	1,338	0.9	140,414	35,472	175,886	9,105	5.2	192,649	24,233	216,882	17,463	8.05
- Del Ejército	34,808	19,737	54,545	1,368	2.5	35,765	27,603	63,368	378	0.6	56,226	34,158	90,384	7,773	8.6
- De los Trabajadores	6,758	5,312	12,070	---	--	8,893	8,186	17,079	---	--	11,692	11,032	22,724	---	--
- Internacional	32,373	13,324	45,697	4,244	9.3	37,035	14,064	51,099	6,150	12	53,921	638	54,449	7,607	13.94
- Metropolitano	6,088	4,335	10,423	312	3	13,374	8,639	22,013	1,898	8.6	27,444	8,593	36,037	5,170	14.3
- Del Café	26,440	3,510	29,950	131	--	42,961	8,452	51,413	209	--	61,595	4,736	66,331	1,220	1.84
- Lloyds Bank	28,785	6,148	34,933	1,715	4.9	29,790	3,323	33,113	1,933	5.84	37,598	1,727	39,325	2,078	5.28
- Banco de América	<u>24,604</u>	<u>5,681</u>	<u>30,285</u>	<u>136</u>	<u>0.45</u>	<u>25,530</u>	<u>5,714</u>	<u>31,244</u>	<u>127</u>	<u>0.41</u>	<u>29,752</u>	<u>4,712</u>	<u>34,464</u>	<u>2,129</u>	<u>6.2</u>
TOTAL	610,627	153,251	763,878	53,041	6.94	722,979	172,197	895,176	74,605	8.33	916,576	146,326	1062,905	94,658	8.91
<u>State Banks</u>															
- Cred. Hipotecario Nacional	61,424	6,610	68,034	6,104	8.97	63,165	10,205	73,370	6,839	9.32	65,921	10,693	76,614	6,870	8.97
- BANVI	<u>10,107</u>	<u>6,686</u>	<u>16,793</u>	<u>524</u>	<u>3.12</u>	<u>9,002</u>	<u>9,034</u>	<u>18,036</u>	<u>1,374</u>	<u>7.62</u>	<u>8,890</u>	<u>9,693</u>	<u>18,583</u>	<u>2,890</u>	<u>15.55</u>
TOTAL	71,531	13,296	84,827	6,628	7.81	72,167	19,239	91,406	8,213	8.99	74,811	20,386	95,197	9,760	10.25

Генерални Банкарски Регистар Белград

NUMERO.....

# CEDULA HIPOTECARIA UNICA

Valor Q. ....

Interés: % Anual

El Banco Granai & Townson, S. A., en su carácter de apoderado especial del emisor, pagará al portador de la presente cédula Hipotecaria, la suma de Q. .... con el interés del % anual, en el plazo convenido de ..... años, mediante el pago de ..... cuotas consecutivas de acuerdo con la tabla de amortización correspondiente, que comprende la amortización del capital e intereses debiendo efectuarse el primer pago el día ..... y las siguientes amortizaciones los días 30 de cada mes, hasta la fecha de vencimiento que será el día ..... en el domicilio de la Entidad Aprobada, situado en la 7a Avenida 186, Zona 4 en la Ciudad de Guatemala.

Las obligaciones contenidas en la presente Cédula Hipotecaria, están garantizadas con primera hipoteca constituida sobre el predio y casa situadas en ..... la cual está inscrita en el Primer Registro de la propiedad Inmueble, formando la Finca Urbana Número ....., Folio ....., Libro ..... de Guatemala, incluyendo sus anexidades y se registrá por las cláusulas y condiciones establecidas en la Escritura Pública Número ..... de fecha ..... ante el Notario .....

Esta Cédula Hipotecaria será la única con que se grave el inmueble que la garantiza. El valor del inmueble gravado es de Q. .... suma que conforme a la ley figura el raíz en la Matricula Fiscal del emisor.

La Entidad Aprobada, en representación propia o del tenedor de la Cédula, podrá dar por vencido el plazo de la obligación y cobrar judicialmente el saldo adeudado por capital, intereses, costas y demás expensas, si el emisor incurriere en mora en el pago de una de las amortizaciones señaladas o incumpliere cualquiera o ra de las obligaciones que están pactadas en la Escritura, debiéndose tramitar la ejecución por el procedimiento de Cédulas Hipotecarias, ya que el presente documento se estima en función de tal. Bastará para iniciar el procedimiento, la simple manifestación del ejecutante de haberse incumplido la obligación, siendo suficiente para fijar el saldo adeudado en éste y cualquier otro caso, la constancia escrita y contable que presente la Entidad Aprobada. La Entidad Aprobada queda facultada para poner en circulación esta Cédula, sin mayor trámite, ya que ha sido emitida a la orden y endoso.

(VUELTA)

BRANCHES - APPROVED ENTITIES

<u>DEPARTMENT</u>	<u>APPROVED ENTITIES</u>	
	<u>State</u>	<u>Private</u>
1. Guatemala	13	68
2. Sacatepéquez	--	2
3. Escuintla	2	13
4. Santa Rosa	--	3
5. Sololá	--	1
6. Quetzaltenango	2	10
7. Suchitepéquez	1	7
8. Retalhuleu	--	4
9. San Marcos	1	4
10. Huehuetenango	--	3
11. El Quiché	1	--
12. Alta Verapaz	1	6
13. El Petén	1	--
14. Izabal	--	5
15. Zacapa	1	2
16. Chiquimula	1	3
17. Jalapa	--	1
18. Jutiapa	--	<u>1</u>
TOTAL	24	133

PRIVATE BANKSCONSOLIDATED GENERAL BALANCE

(In Thousands of Quetzales)

	1979		1980		1981		Cumulative % 79-81
	Value	%	Value	%	Value	%	
<u>ASSETS</u>							
Cash	274,876	19.6	250,717	15.6	273,146	15.0	( 0.6)
Loans	856,390	61.0	1,021,800	63.7	1,118,653	61.8	30.6
Investments in Securities	62,605	4.5	89,339	5.6	142,386	7.9	127.4
Mortgage Certificates	53,041	3.7	74,605	4.6	94,658	5.2	78.4
Other Assets	157,479	11.2	168,474	10.5	182,179	10.1	15.7
<u>TOTAL</u>	<u>1,404,391</u>	<u>100.0</u>	<u>1,604,935</u>	<u>100.0</u>	<u>1,811,022</u>	<u>100.0</u>	<u>29.0</u>
<u>LIABILITIES</u>							
Site Deposits	308,933	22.0	319,992	19.9	333,138	18.4	7.8
Savings Deposits	610,627	43.5	722,979	45.1	916,579	50.6	50.1
Term Deposits	153,251	10.9	172,197	10.7	146,326	8.1	( 4.5)
Foreign Currency Deposits	735	--.-	1,091	0.1	818	--.-	11.3
Other Notes	108,843	7.7	115,157	7.2	111,649	6.2	2.6
Central Bank Credits	72,740	5.3	118,027	7.3	115,378	6.4	58.6
Other Liabilities	22,806	1.6	22,432	1.4	43,552	2.4	91.0
Sub-Total	1,277,935	91.0	1,471,875	91.7	1,667,440	92.1	30.5
Capital, Reserves, Profits	126,456	9.0	133,060	8.3	143,582	7.9	13.5
<u>TOTAL</u>	<u>1,404,391</u>	<u>100.0</u>	<u>1,604,935</u>	<u>100.0</u>	<u>1,811,022</u>	<u>100.0</u>	<u>29.0</u>