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AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

MAURITIUS SHELTER PROGRAM

Project No. 642-HG-001

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

1. TRANSACTION CODE: A (A = ADD, C = CHANGE, D = DELETE)

PP

2. DOCUMENT CODE: 3

3. COUNTRY/ENTITY: MAURITIUS

4. DOCUMENT REVISION NUMBER:

5. PROJECT NUMBER (7 digits): 642-HG-001

6. BUREAU/OFFICE: A. SYMBOL: AFR; B. CODE: 06

7. PROJECT TITLE (Maximum 40 characters): MAURITIUS SHELTER PROGRAM

8. ESTIMATED FY OF PROJECT COMPLETION: 83

9. ESTIMATED DATE OF OBLIGATION: A. INITIAL FY 80; B. QUARTER 4 (Enter 1, 2, 3, or 4); C. FINAL FY 81

10. ESTIMATED COSTS ($000 OR EQUIVALENT $1 –)

A. FUNDING SOURCE	FIRST FY B. FX	FIRST FY C. L/C	FIRST FY D. TOTAL	LIFE OF PROJECT E. FX	LIFE OF PROJECT F. L/C	LIFE OF PROJECT G. TOTAL
AID APPROPRIATED TOTAL						
(GRANT) DG	(125)	( )	(125)	(250)	( )	(250)
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER U.S. 1. HG Loan	6000		6000	6000		6000
OTHER U.S. 2.						
HOST COUNTRY		1,500	1500		1,500	1500
OTHER DONOR(S)						
TOTALS						

11. PROPOSED BUDGET APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 80 F. GRANT	E. 1ST FY 80 G. LOAN	H. 2ND FY 81 I. GRANT	H. 2ND FY 81 J. LOAN	K. 3RD FY ___ L. GRANT	K. 3RD FY ___ M. LOAN
(1) AR	720	862		125		125			
(2)									
(3)									
(4)									
TOTALS									

A. APPROPRIATION	N. 4TH FY ___ O. GRANT	N. 4TH FY ___ P. LOAN	Q. 5TH FY ___ R. GRANT	Q. 5TH FY ___ S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1) AR					250	
(2)						
(3)						
(4)						
TOTALS						

12. IN-DEPTH EVALUATION SCHEDULED: MM 05 YY 83

13. DATA CHANGE INDICATOR. WERE CHANGES MADE IN THE PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15 OR IN PRP FACESHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET.

1 (1 = NO, 2 = YES)

14. ORIGINATING OFFICE CLEARANCE

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DATE SIGNED: MM 07 DD 31 YY 80

15. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

AID 1330-4 (3-76)

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TABLE OF ABBREVIATIONS

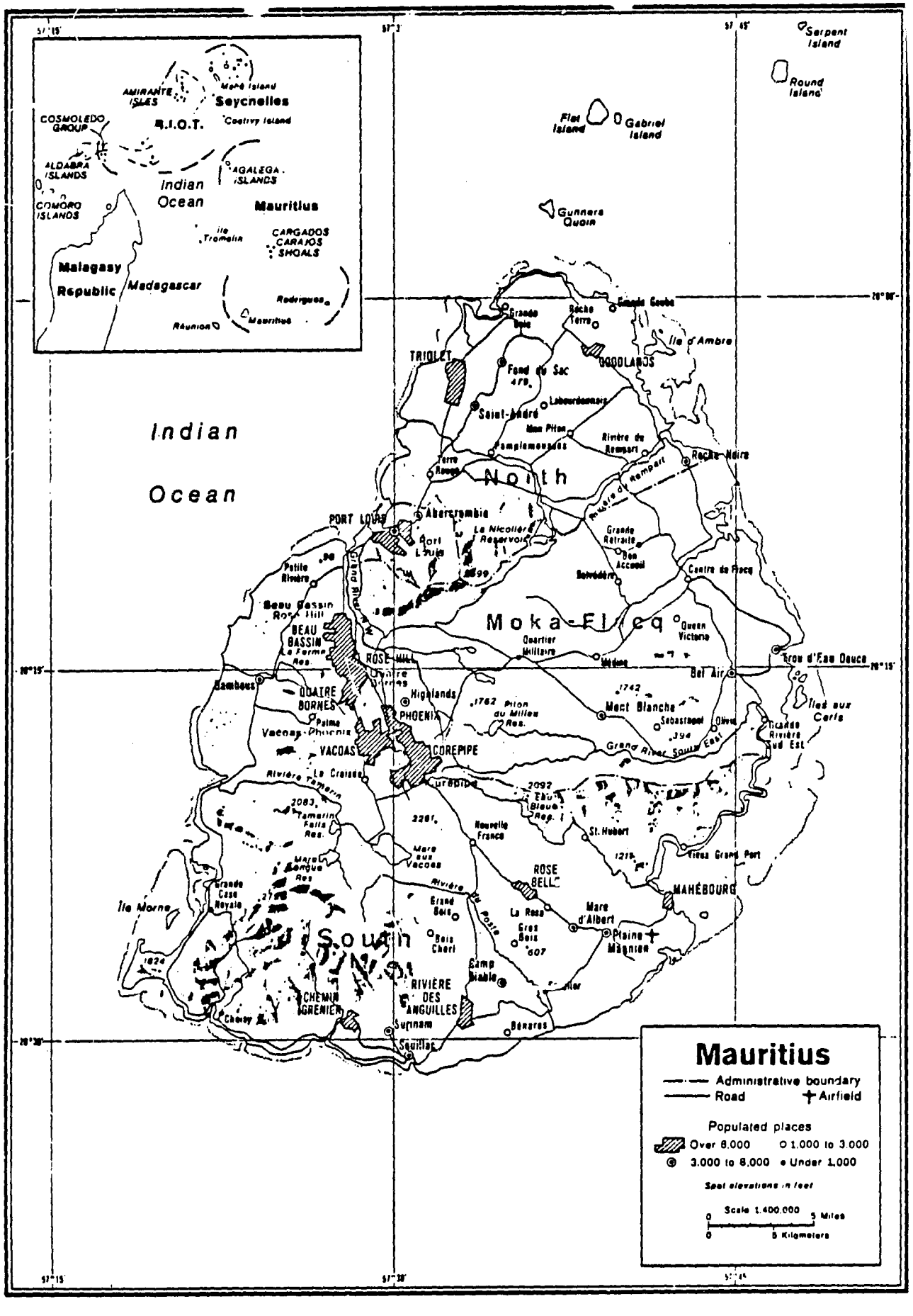
CHA	Central Housing Authority
DS/H	Office of Housing, A.I.D.
EDF	European Development Fund
GOM	Government of Mauritius
HG	Housing Guaranty Program
IBRD	International Bank for Reconstruction and Development
MHC	Mauritius Housing Corporation
MHL	Ministry of Housing, Lands and Town and Country Planning
RHUDO	Regional Housing and Urban Development Office (Nairobi, Kenya)

CURRENCY EQUIVALENTS

Currency Unit	=	Mauritian Rupee
US $1.00	=	Rs. 7.5
Rs. 1	=	US $.133

METRIC EQUIVALENT

$1m^2$	=	10.75 square feet


Mauritius
Administrative boundary
Road
Airfield
Populated places
Over 8,000
1,000 to 3,000
3,000 to 8,000
Under 1,000
Spot elevations in feet
Scale 1:400,000
5 Miles
8 Kilometers
Indian Ocean
Seychelles
B.I.O.T.
Mauritius
Madagascar
Malagasy Republic
Réunion
Rodrigues
Serpent Island
Round Island
Flat Island
Gabriel Island
Gunners Quoin
Ile d'Ambre
TRIOLET
GOODLANDS
Saint-André
Pamplemousses
Rivière du Rempart
Roche Noire
North
PORT LOUIS
Abercrombie
Grande Retraite
Bon Accueil
Centre de Flacq
Moka-Flacq
Quartier Militaire
Queen Victoria
Trou d'Eau Douce
Bel Air
Ile aux Cerfs
BEAU BASSIN
ROSE HILL
Curepipe
Highlands
PHOENIX
Piton du Milieu Res.
Mont Blanche
Sebastopol
Olivet
Grand River South East
Vacoas
La Caverne
Rivière Tamarin
Tamarin Falls Res.
Mare aux Vacoas
Nouvelle France
St. Hubert
Vieux Grand Port
ROSE BELLE
MAHÉBOURG
Mare d'Albert
Plaine Magnien
Grand Bois
Bois Chéri
Camp Diable
RIVIÈRE DES ANGUILLES
CHEMIN GRENIER
Souillac
Bénares
Ile Morne
Grande Case Noyale
South

I. SUMMARY AND RECOMMENDATIONS

I.A. Recommendations

Based upon a review of the proposal set forth in this paper, it is recommended that the subject guaranty be approved as follows:

Amount of Guaranty: $6 million

Term: The consolidated loan will be for a period of up to 30 years with a grace period for the repayment of principal to be negotiated with the Investor.

Interest Rate: The interest rate payable to the U.S. Investor shall not exceed the allowable rate of interest prescribed by the AID administrator pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar type loans.

Technical Assistance: Resident technical assistance will be provided for two years to assist the GOM in project implementation especially in program monitoring and coordination. This assistance, at a total estimated cost of $250,000, will be funded through a Direct Grant from the resources of the Africa Bureau.

I.B. Summary Project Description

I.B.1. Background

AID has been involved in the shelter sector in Mauritius for several years following a GOM request for assistance in financing shelter reconstruction after the 1975 Gervaise cyclone. In response, AID undertook a Shelter Sector Assessment in 1978 which made the following major recommendations:

- reduce or eliminate subsidies to expand financial resources available for housing;
- reduce construction standards to make housing more affordable to lower-income households;
- increase institutional capacity by creating a housing unit within the Ministry of Housing, Lands and Town and Country Planning (MHL);
- increase construction sector efficiency.

It was felt that if the majority of the SSA's recommendations were carried out, the GOM's housing programs would be put on a more financially self-sufficient basis.

Through AID sponsorship during the last two years, the GOM has carried out a demonstration prototype core housing project at six sites throughout the country. The houses were completed in early 1980, and a detailed market survey (see Annex 5) carried out testing market reaction and level of economic demand. The results indicated a very favorable response to the core housing concept by most potential homebuyers interviewed. The popularity of this demonstration program is also credited with having a significant political effect in bringing about necessary GOM policy changes.

The GOM is now planning new programs of affordable core houses at economic terms for the lower-income population. These new directions represent a marked departure from the heavily subsidized shelter programs which existed prior to AID's involvement in 1978. A de facto housing unit is now operating in the MHL to coordinate new housing policies and programs.

With a population of about 930,000 in 1980, Mauritius is one of the world's most densely populated countries with 12,000 persons per square mile. Five municipalities contain 44% of the population. Due to effective family planning measures and some degree of emigration, Mauritius has achieved a low rate of population growth estimated to be 1.1% annually. New housing requirements exceed 2,000 units annually for new family formation and must be added to those dwelling units lost through deterioration or cyclone damage.

The GOM requested AID Housing Guaranty assistance after the overwhemingly positive results of the prototype core housing program became known. The Board of Directors of the Mauritius Housing Corporation have also indicated their approval of participating in a Housing Guaranty project.

I.B.2. Project Goal and Purpose

The sector goal is to assist the GOM to develop the institutional, technological, and financial capacity to provide shelter under reasonable conditions for all levels of society with emphasis on government and private sector actions to meet the needs of families of below median income.

The purposes of this project are: (a) to increase production of low cost housing by institutionalizing the aided/self-help, minimum standard, maximum cost recovery approach, and (b) to strengthen shelter institutions by establishing within the MHL a housing unit and further developing the MHC as a housing finance institution for lower income groups.

Anticipated end of project conditions include:

- shelter provided for 1,500 families with access to water, sewerage and electrical infrastructure and long term housing finance and secure tenure.

- a group established and functioning within the MHL to plan, design, implement, and manage comprehensive low cost shelter programs and to coordinate housing policy.

a strengthened MHC with the capacity to originate and service low income housing construction and building materials and mortgage loans through expanded staff and automated financial systems.

I.B.3. Beneficiaries

The proposed project will benefit 1,500 low income families throughout Mauritius through the provision of new shelter. Other households will indirectly benefit from the employment generating impact of project construction.

The household income range of the target population is from the 25th to the 50th percentile for serviced sites and core housing and from the 20th to the 50th percentile for home construction loans. The amount of home construction loans will be tailored to be affordable to lower income households.

The Core Housing Market Survey revealed that 14% of household heads were female. Of the interviewees, about 30% were female, and, of these, 42% were household heads. Thus, it is likely that there will be a significant demand for the shelter solutions offered under this program by women. This project will encourage women to make use of their right to equal access to ownership.

I.B.4. Outputs

The Mauritius low cost shelter project will be comprised of 500 serviced plots, 500 expandable core houses, and 500 home construction loans. The cost of the two types of serviced plots will range from $3,420 (Rs 25,648) to $4,087 (Rs 30,656) depending on size of plot and size of construction loan. The cost of the core house will be $4,211 (Rs 31,588) while the size of the home construction loan will be determined by the borrower's needs and ability to repay but will be limited to a maximum of $4,211 (Rs 31,588).

Institutional outputs will include the creation of a Housing Unit within the MHL to coordinate, plan, implement, and manage large scale, low cost shelter projects for low income families. In addition, MHC will be strengthened through an expansion of staff capable of administering a significant low-cost housing portfolio and the installation of automated loan processing equipment. These changes at MHC will allow the organization to serve lower income clientele.

Another expected institutional output is improved capacity for physical planning and long term housing programming at MHL which will be facilitated by the proposed technical assistance in project planning and coordination.

It is estimated that employment will be increased through the high labor content of the proposed construction activities. The project should generate 1,700 months of skilled employment and 2,700 months of unskilled employment in the construction of the core houses and serviced sites. In addition, the home construction loans should generate 1,725 months of skilled and 4,500 months of unskilled employment for the project.

I.B.5. Inputs

A HG loan of $6 million will be authorized and contracted with an eligible U.S. Investor.

The host country contribution to this project will take three forms: allottee down payments and personal savings contributed to self-help construction totaling $670,000; and land provided by the GOM carrying a preliminary estimate of $500,000. In addition, the GOM is providing substantial contributions in the form of approximately $300,000 of staff salaries and overheads related to project planning and implementation, especially in the MHL.

Long term technical assistance will be provided through a $250,000 Direct Grant from the Africa Bureau. Other short term technical assistance may be provided as necessary, possibly funded by HG fee income.

I.B.6. Important Assumptions

The key assumptions underlying this proposal are that (a) the host country agencies will provide their agreed inputs; (b) MHL and MHC establish an effective arrangement for implementation activities; (c) appropriate sites can be acquired; and (d) adequate financing remains available for middle income housing to forestall appropriation of project units by ineligible, higher income persons.

I.B.7. Other Donor Activity

The World Bank is tentatively planning a 3,000 unit shelter project to be financed over a 4 year period beginning in 1980. A large number of units, including upgrading programs, will be concentrated in the capital city of Port Louis.

The European Development fund is planning a $4.4 million housing loan program including serviced sites, core housing, and construction loan sub-programs.

The GOM Ministries of Economic Planning & Development and of Finance coordinate Foreign Assistance in collaboration with the MHL for the shelter sector. The three donor programs (including AID) are considered compatible, and sufficient housing demand exists to complete them all. Although other donors' loans will probably carry lower interest rates than the HG loan, the MHL and the MHC plan to equalize rates to beneficiaries at 12% to avoid subsidies and confusing disparities between programs.

I.C. Summary Findings

I.C.1. Economic Analysis

Since the production and export of sugar constitutes about 85% of Mauritius' exports and 60% of its gross domestic product, the economy is very much tied to the world sugar price. Following the dramatic 1976 drop in the world price, the Mauritian economy has entered a period of slower growth and retrenchment. Growth has also stagnated in export processing industries in recent years.

Due to the collapse in sugar prices, Mauritius' current account deficit has risen from about 6% of GDP in 1976 to 12% in 1978. At the same time, the GOM budget has fallen into serious deficit.

Together with the IMF, the GOM initiated an economic stablization program late in 1979 which included a 23% devaluation, slower domestic wage increases, and a gradual phasing out of many government consumption subsidies.

Although total GOM debt rose substantially during the last few years, external debt servicing has remained manageable. Service payments on public and private debt amounted to only about 5% of exports in 1978. The proposed HG loan would only increase the amount of annual debt servicing by about .03% and thus would not add significantly to the debt servicing burden.

I.C.2. Social Analysis

With 18 languages spoken, the population of Mauritius is very diverse both ethnically and culturally. Nevertheless, there is little evidence of rigid stratification of neighborhoods either by socio-economic class or ethnic origin. The GOM is anxious to avoid the creation of large, new communities dislocated from their traditional residential areas and unintegrated into the community in general. Therefore, the proposed project will consist primarily of scattered sites with no more than 25 plots or core houses per site to achieve maximum neighborhood integration.

The recently completed market survey of the AID financed core housing project has demonstrated wide acceptance of the concept of full cost recovery for housing which can be expanded by the tenant purchaser. One factor behind the high preference for core housing appears to be the trend towards nuclear family living. Many younger couples are currently living with their parents and would like to set up separate households on a limited budget.

During the market survey, visitors were given the chance to comment upon the designs presented. The majority of comments favored a 2-room house to provide privacy between parents and children, while the possibility of expansion allows for separation of children by sex as they grow older and for accommodation of parents (or other older relatives) when it becomes necessary.

The project may have two substantial spread effects. First, the project will contribute towards the increased social acceptability of lower standards, more affordable solutions. Second, individual self-help informal construction will be given a strong impetus from the formal sector with the implementation of this project.

Single women (including divorcees and widows) may own property and contract loans in their own right. The Mauritius Housing Corporation has granted loans to women for housing purposes but to date these are rather few. The proposed Housing Guaranty Program will attempt to ensure that women applicants who meet housing allocation criteria set forth under this program are considered equally with men.

I.C.3. Technical Analysis

Using identified criteria, 20 sites have been tentatively identified for the first year of program. MHL officials are beginning the land acquisition process which should take about 6 months. During the first year of the program, the MHL will use the same criteria to identify and acquire an additional 20 sites for the second year of the program. Most sites identified to date are urban infill sites in or near existing residential areas which have access to off-site water and electricity.

The planning standards proposed for site layouts, infrastructure and core house construction have all been designed to be affordable to the target groups. This is in sharp contrast to previous housing programs in Mauritius which have combined expensive standards with large interest and capital subsidies.

The following program components comprise the project:

- Core houses. Core houses of 264 square feet are proposed to be built on plots 900 square feet in area. The core houses will contain a small sitting room and bedroom, kitchen, and toilet. The structure will be designed as a semi-detached unit suitable for expansion. Suggestions given during the market survey have been incorporated into the revised design.

- Serviced plots. Two plot options have been developed. The first, aimed at the 25th to 30th percentiles of income would have an area of 900 square feet, while the second would be larger, 1,050 square feet, and, therefore, targeted to households in the 30th to 50th percentiles. The MHL and the MHC will provide prospective homeowners with plans of detached units which can be built on each plot type. Building construction loans will be provided in varying amounts. The MHC will have the primary responsibility for construction inspection and loan disbursement and collection.

  Home construction loans. These loans will be disbursed to families of below median income who already own their own partially developed or undeveloped plot of land. Based on the market survey, the average size of the loans is anticipated to be about $4,000 (Rs 30,000). The MHC will take primary responsibility for construction inspection and loan disbursement.

The program will concentrate on using locally available materials to the greatest extent possible thus restricting imported components to about 38% of total construction costs.

I.C.4. Administrative Analysis and Plan

The MHL plays the major government role in the shelter sector for low cost housing. In addition to site selection and acquisition, the MHL has been directly involved in the planning of the three externally funded projects presently being proposed. To date these activities have taken place within the Town and Country Planning Division, but as the number of special projects continues to increase, the GOM is now considering the establishment of a Housing Unit within the MHL.

The MHC is a largely self-sufficient parastatal organization under the Ministry of Finance. As a primarily commercial operation, the MHC has maintained high operational efficiency in its borrowing and lending for housing construction and purchase. As of June 30, 1979, the MHC was servicing 4,522 loans with a negligible delinquency amount of only .034% of mortgage assets. The present MHC policy is to support a lowering of housing construction standards so that housing can be more affordable to lower income groups. During the 1978/1979 fiscal year the MHC implemented its directive to lend to lower income families and made 35% of its loans to families with income of less than $200 (Rs 1,500) per month.

Under the proposed loan program, the MHC will be the primary channel of loan funds and the administrator of loan collections. In the case of core housing and serviced sites, the MHL will take the main development initiatives (i.e. site selection, design, and construction supevision) and then in accordance with a formal agreement to be negotiated, the MHC will handle fiscal disbursements and technical supervision for individual housing loans. This division of labor involving a working relationship between the MHL and the MHC has already evolved for other special low income projects.

The MHL will need additional staff to implement this and other special housing projects. AID will have to monitor professional staff development as the project develops to ensure that MHL has sufficient capacity to execute the project.

Following execution of the project, the MHC will be in charge of loan servicing and repayment. It is anticipated that MHC will obtain GOM approval to charge a higher handling fee than previously to economically cover these functions. Further, the MHC will have to recruit more staff and implement an automated program for routine portfolio management and delinquency reporting.

I.C.5. Financial Analysis

Total project cost will be about $7.5 million with proposed affordable to the target group at market interest rates.

Recovery of the shelter investment will be by monthly installments - level and graduated, at an interest rate of 12% over a range of terms from 20 to 25 years.

TABLE 1 - I.

PROJECT FINANCIAL COMPONENTS

Program Component	Percentile Income Group Served (%)	Average Unit Cost or Loan Size (US $)	Number of Units or Loans
1. Core Houses (Type I)	50th	$4,211 (Rs. 31,588)	500
2. Serviced Plots			
(Type I)	25th-30th	$3,420 (Rs. 25,648)	300
(Type II)	30th-50th	$4,087 (Rs. 30,656)	200
3. Home Construction Loans	20th-50th	$4,000 (Rs. 30,000) (avg.)	500
TOTALS			1,500

I.C.6. Implementation

The project period is February 1981 through May 1983; a schedule has been prepared for this period which projects commencement of construction in mid 1981 and completion of move-ins late in 1983.

Regular annual evaluations are proposed for this project which will measure impact both in terms of housing production with improvements in the welfare of the beneficiaries and of the increased institutional capacity of MHL and MHC to plan, manage, and implement a large program of low-cost shelter for families of below median income.

II. DETAILED DESCRIPTION

II.A. Background

II.A.1. Prior AID Activity

AID has been involved in the shelter sector in Mauritius for several years. The Government of Mauritius (GOM) first requested AID assistance for financing the Gervaise cyclone reconstruction program in late 1977. In response, a Shelter Sector Assessment was undertaken by AID early in 1978. The major recommendations of the SSA were as follows:

a. Reduce construction standards from high standard completed units to core units which are still cyclone proof; reduce infrastructure standards and increase project densities; utilize cross subsidies where possible in the design of more comprehensive projects; and extend housing improvement loans to low income families in general.

b. Increase institutional capacity by creating a housing division within the Ministry of Housing, Lands and Town and Country Planning (MHL); strengthen the Central Housing Authority (CHA) such that it could design, build and manage housing affordable by low income families on economic terms; and expand funding to the Mauritius Housing Corporation (MHC) and channel housing improvement loans through it.

c. Increase construction sector efficiency through training programs for construction supervisors; reduce emphasis on capital intensive construction systems; encourage and train more small-scale contractors; increase use of indigenous building materials; and give greater emphasis to performance standards rather than building codes.

It was felt that if the majority of the foregoing recommendations were carried out, government housing programs would be put on a more financially self-sufficient basis. Through continuing AID involvement over the past two years, progress has been made in this direction.

In 1979, a demonstration prototype core house project was undertaken by AID and the GOM to test the effective demand for core housing to be sold on economic terms and to determine whether low income families have sufficient resources to expand core units. Two sets of core houses were built at six demonstration sites throughout the country. The houses were completed in early 1980 and a detailed market survey was undertaken with AID technical assistance. The results indicate a very favorable response to the core housing concept by most of the potential homebuyers interviewed (see Section III.B.2.).

II.A.2. GOM Policy Changes

Since the SSA was undertaken by AID in 1978, the GOM has begun to make several policy shifts, many of which are in response to the issues raised at that time. Prior to 1978, GOM housing initiatives involved high standard complete houses which were sold or rented under heavily subsidized terms (see Section III.D.1.). Now, for the first time, new programs are being planned to provide affordable core houses and more efficient site layouts for the low income groups at economic terms. Loans to finance core house completion and construction on individual sites and in home improvements are also being considered. The MHC is being strengthened and its efforts redirected to provide increased mortgage financing for low income households. A de facto housing unit is now operating in the Ministry of Housing to coordinate new housing programs and projects. The government is seriously considering the establishment of a permanent housing unit to manage special low income projects and to coordinate housing policy. The CHA has recently been subject to a thorough government audit. As a result, a series of measures are being recommended to improve the organization's efficiency, including a new accounting and management information system.

II.A.3. Population and Shelter Overview of Mauritius

With a population of about 930,000 in 1980, Mauritius is one of the world's most densely populated countries. There are about 12,000 persons per square mile. No locality is more than 25 miles from a town center.

In 1972, the five municipalities of Mauritius contained 44 percent of the population. These cities form an urban corridor stretching from Port Louis to Curepipe which is by far the country's most urbanized area.

Due largely to an effective family planning program, Mauritius has achieved a relatively low rate of population growth which is currently estimated to be about 1.1 percent per year. In addition, the five municipalities appear to be growing slowly. Their total population increased to 382,000 in 1977 from 365,000 in 1972, an annual increase of only about one percent. However, these statistics mask some degree level of emigration from the country, 34,000 in the 10 years preceding 1972, most of which is from the cities, and a corresponding influx of low income migrants into the municipalities from the rural areas.

The Shelter Sector Assessment estimated a replacement housing need in 1978 of about 21,500 units. This was due to overcrowding (an average of 1.12 households per house in 1972), a large amount of housing made of temporary materials or in deteriorated conditions and requiring replacement (15 percent of the housing stock according to the 1972 census) and a large number of units destroyed in recent cyclones. About 13,000 units were destroyed by cyclone Gervaise in 1975. According to the SSA, an estimated 61 percent of the households requiring housing had incomes below the median level. Later studies have indicated an annual replacement in new housing of approximately 10,000 units.

During the past three years, the public sector, including the MHC, and the private sector has only produced and/or financed an average of half the number of units required. Past public sector production has been highly subsidized and insufficiently targeted towards the lower income groups. Because of the remaining unmet demand, a large additional amount of unplanned informal construction is being undertaken by individuals.

II.A.4. GOM Request for Assistance

In February 1980, the GOM sent a letter of intent to AID requesting AID Housing Guaranty assistance for Mauritius. The GOM request, signed by the Minister of Finance, came just after the initial results of the AID financed prototype core housing survey were known and it was evident that this type of housing was acceptable to the public.

In April 1980, the Board of Directors of the Mauritius Housing Corporation approved the participation of the MHC in the proposed HG project.

II.B. Project Goal and Purpose

II.B.1. Sector Goal

The sector goal is to assist the GOM to develop the institutional, technological, and financial capacity to provide shelter under reasonable conditions for all levels of society with emphasis on government and private sector actions to meet the needs of families of below median income.

II.B.2. Project Purposes

The purposes of the proposed Housing Guaranty project are two-fold. The first is to increase the production of low cost housing through the institutionalization of the aided/self-help, minimum standard, maximum cost recovery approach to low cost housing. The second purpose is to increase the capacity of existing shelter institutions to more effectively serve lower-income households. This will be achieved by the establishment of a group within the Ministry of Housing (MHL) to design and supervise low income shelter projects and also coordinate program activities of other shelter sector institutions more effectively. In addition, the capacity of the Mauritius Housing Corporation (MHC) as a housing finance institution accessible to lower income group with a financial system capable of handling an increase in business volume will be strengthened.

II.B.3. End of Project Status

It is anticipated that the following conditions will prevail at the end of the project,demonstrating that its purposes have been substantially achieved:

a. MHL will have effectively planned and implemented the USAID Mauritius Shelter Program resulting in 1,400 low-cost, cyclone resistant shelter units affordable by families below the median income. The project will use affordable standards and economic cost recovery. Beneficiaries will occupy their units by the end of 1983.

b. By the end of 1983 the MHL will be playing an effective role in coordinating both externally financed programs and the activities of domestic institutions in the planning, management, implementation and administration of large-scale, comprehensive shelter programs. Prime responsibility for these functions at the MHL will rest with the newly established Housing Unit.

c. A strengthened MHC will have an expanded staff and automated loan processing system and be financing much larger amounts of housing for low income households. In FY 1978/79 only about 23% of MHC loans went to families below the median income. By 1983, 50% or more of MHC's loans will be to these lower income families.

II.C. Beneficiaries

Direct beneficiaries of the HG component of the project will be those households earning less than the median income (estimated 1979 figuresat $157 or Rs 1,180 per month) who will be participants in the shelter sub programs and will obtain, core houses, serviced sites, or house construction loans. These beneficiaries will be selected according to procedures to be drawn up by the MHL and MHC and approved by AID. Criteria of the allottee selection plan in addition to household income restrictions will include no ownership of other residential real estate and a covenant to reside on the premises. Other indirect beneficaries will include those active in project construction (see Section II.D.3.).

The household income range of the target population is from the 20th to the 50th percentile as shown on Tables II-1. and II.2. below. This placement corresponds to a projected household income range from $108 to $157 (Rs 810 - 1,180) per month.

The estimated monthly household income distribution after the most recent currency devaluation and wage increases (November 1979) is shown in Table II-1. This distribution is based on the 1975 Household Budget Survey, adjusted to reflect estimates of under reporting at that time and subsequent income increases.

Table II-1
Estimated Household Income
November 1979

Percentile	Estimated Family Income (Rs/month)	Estimated Family Income ($/month)
10	560	75
20	810	108
30	940	125
40	1,040	139
50	1,180	157
60	1,430	191
70	1,790	239
80	2,340	312

Table II-2 shows the affordability of the proposed loan packages. A core unit of 264 sq. ft. is affordable by households at the 50th income percentile on a 900 sq. ft. lot. Service site options are also proposed for households from the 25th to the 50th percentiles. These would provide serviced plots of 900 sq. ft. and 1,050 sq. ft. together with home construction loans. The amount of home construction loans will be tailored to be affordable to lower income households.

Home construction loans are also proposed for households already owning land. The amount of such loans affordable by each income group is shown in Part II of Table II-2. These loans should be available to some households with incomes as low as the 20th percentile. Fifteen percent of the respondents to the MHL/AID survey already owned plots and MHL officials are convinced that there are many more plot owners who did not respond to the survey. About 35 percent of the plot owners responding to the survey had monthly incomes of less than $133 (RS 1,000). Past MHC experience has shown that even low income households invest large amounts of their savings during the early stages of construction, in addition to their own labor. Loan drawdowns are frequently only made to finance the final stages of construction after savings have been expanded. This often limits the amount of loans required for new home construction.

TABLE II-2

Affordability Analysis for Core Housing and Sites and Services[1/]

		Core Housing	Serviced Plot Options Type I	Serviced Plot Options Type II
I. CORE HOUSES AND SERVICED SITES				
Percentile income group		50	25- 30	30 - 50
Monthly income	(US$)	100	117- 133	133- 160
	(Rs.)	(1200)[4/]	(875-1000)	(1000-1200)
Percent of income for housing		25	25	25
Monthly payment	(US$)	40	29- 33	33- 40
	(Rs.)[2/]	(300)	(220- 250)	(250- 300)
Downpayment (%)		10	10	10
Annual interest (%)		12	12	12
Recovery period (years)		25	25	25
Total Unit Cost Affordable	(US$)	4,211	(3,093-3,520)	(3,520-4,220)
	(Rs.)[3/]	(31,588)	(23,200-26,400)	(26,400-31,650)
Land cost at Rs. 300,000/acre	(US$)	933	933	1,088
	(Rs.)	(7,000)	(7,000)	(8,161)
On -site infrastructure costs	(US$)	85	85	99
	(Rs.)	(639)	(639)	(739)
Site clearance cost	(US$)	201	201	234
	(Rs.)	(1,509)	(1,509)	(1,756)
Construction cost/ft^2	(US$)	11	--	--
	(Rs.)	(85)	--	--
Core house size (ft^2)		264	--	--
Construction loan	(US$)	--	1,873-2,300	2,100-2,800
	(Rs.)[3/]	--	(14,050-17,250)	(15,750-21,000)
Plot size (ft^2)		900	900	1,050
Plot frontage (ft)		18	18	21
Plot depth (ft)		50	50	50
Approximate density (units/acre)		43	43	37

continued . . . .

TABLE II-2 (continued)

II. HOME CONSTRUCTION LOANS[2/]

Income Group			Affordable Monthly Payment	Total Home Construction Loan
Approximate Percentile	Income/Month			
20	750	(US$)	25	2,640
		(Rs.)	(187.)	(19,800)
25	875	(US$)	29	3,080
		(Rs.)	(219.)	(23,100)
40	1,000	(US$)	33	3,520
		(Rs.)	(250.)	(26,400)
50	1,200	(US$)	40	4,211
		(Rs.)	(300.)	(31,588)

1/ Columns may not add exactly due to rounding.

2/ All calculations assume 25 percent of income available for housing and 12 percent loans for 25 years.

3/ All affordability calculations assume a 10 percent downpayment in the case of core houses or a 10 percent owners' contribution in the case of construction loans.

4/ In June 1980, workers in this category received through GOM decree an 11% pay raise increasing median income to approximately Rs. 1,300 per month. For purposes of this project, the median income will be indexed to reflect wage increases mandated by the GOM or caused by inflation.

In calculating affordability, it was assumed that households will spend 25 percent of their incomes to amortize housing loans. Although this is higher than traditional housing expenditures, which have tended to be in the form of highly subsidized rents, the AID/MHC survey indicated a desire and willingness of households to pay more for new or improved housing. A recent MHC household survey confirmed this finding. It showed that many households, including low income households, are willing to pay 33 percent of incomes or more for better housing. In addition, most Mauritians are aware of the need to build durable houses which are cyclone resistant, and they are generally willing to pay for this increased security.

Sources of income will be primarily wage employment. The SSA indicated that employment prospects for the low-income population are "encouraging". It was reported that one study estimated that 45% of the job opportunities created in the period 1972 - 1982 would require an educational level no higher than the Primary School Leaving Certificate.

The entire labor force in Mauritius is in the cash economy. As of the 1972 Census, 83% of the male population aged 15 and over participated in the labor force as compared to 20% of the females. However, the number of women in employment in Mauritius has been steadily increasing over the last few years, especially since the opening of the Export Processing Zone in 1972. Between 1972 and 1979 the number of women working in the Export Processing Zone rose from 742 to 15,370.

In 1977, female industrial workers comprised 15,413 out of a total female employed labor force of 61,000, which was about 25 percent. The next largest employer of females is the sugar industry in which women comprised 13,407 or 28 percent of industry employees in March 1979.

Mauritius has yet to become a signatory to the ILO Agreement (equal pay for equal work). Women in Mauritius are not necessarily paid the same wages as men. This may have some effect on the number of women able to benefit under a full cost recovery housing loan program.

In view of the increasing number of Mauritian women entering the labor force, the proposed housing program will take account of the needs of working women by attempting to locate housing as close as possible to existing employment opportunities, transport, schools, nurseries and other community facilities.

Of the market survey interviewees of the USAID sponsored Prototype Core Housing Unit program, 30% were female, and, of these, 42% were household heads. There is thus likely to be a significant demand for the shelter solutions offered under the proposed loan program by women. Women will be eligible for the HG program in accordance with their capacity to repay the loans.

Available data suggests that most of the beneficiaries will come from older, overcrowded housing units where they have rented rooms in houses shared with other households. While utility services are not likely to be major inducements, increased space and privacy and homeownership will be major benefits. In addition, many of the beneficia ries will be vacating shelter units described as either "deteriorated" or

"dilapidated" and have access to the new HG financed housing. Although hard to quantify, there should be consequential improvements in health and productivity resulting from these relocations.

II.D. Outputs

II.D.1. Physical

The proposed HG project will produce 500 core houses, the design of which is described in Section III-C.3. Two hundred and fifty core houses will be constructed in the first year and an equal number will be constructed in the second year of the project.

The project will also produce 500 serviced plots, 300 of which will have areas of 900 sq. ft. and 200 of which will have 1,050 sq. ft. areas. Half of the plots will be produced in the first year of the project and the rest will be produced in the second year. Recipients of serviced plots will also receive construction loans in amounts ranging from $1,867 - $2,800 (Rs. 14,000 to Rs. 21,000).

Five hundred construction loans of up to $4,211 (Rs. 31,588) will be given to households already owning plots of land. Two hundred of these will be made in 1981; the rest will be offered in 1982.

Because of the experimental nature of the proposed project, the mix of core houses, serviced plots and construction loans will be reevaluated for the second year in accordance with market preferences actually experienced during the first year of the project.

II.D.2. Institutional

There are two principal institutional outputs for this project; the first is the creation of a Housing Unit within the MHL to coordinate this program and to develop a long-term plan for the finance and production of shelter units for lower income families. The creation of the Housing Unit will require the recruitment or secondment of additional staff to the MHL.

The second principal institutional output involves the strengthening of the MHC through the installation of a revised, automated portfolio and accounts management system which will enable it to post 2,000 monthly loan accounts. In addition, the capacity of the MHC to originate and service low income mortgage loans will also be improved. Through hiring additional staff, the MHC will be able to increase its capacity for construction inspection and loan disbursement. The MHC will also examine the feasibility of introducing a graduated payment mortgage system into their projects.

II.D.3. Employment

The site works infrastructure development and core house construction are expected to provide approximately 1,700 person months of employment for skilled labor and 2,700 person months of employment for unskilled labor. The home construction loans will provide an estimated additional 1,725 person months of employ-

ment for skilled labor and 4,500 person months of employment for unskilled labor, most of which will be provided through self-help and small contractors.

II.E. Inputs

II.E.1. HG Loan

A HG loan of $6 million will be authorized and contracted with an eligible U.S. investor.

II.E.2. Host Country Contribution

The host country capital contribution will take three forms: downpayments, personal savings contributed to self-help construction, land, and direct staff costs and overhead related to GOM project planning and implementation.

Downpayments by beneficiaries will be 10% of dwelling development cost, including cost of attributable infrastructure, dwelling construction (in the case of the core housing), and loans for home construction. In the aggregate the downpayments and personal savings contributed will total about $670.000.

A considerable investment has been made by the GOM in direct staff time and overheads in the preliminary planning activities so far undertaken by the MHL. For the implementation of the project an estimated $300,000 will be budgeted for administrative and overhead costs directly attributable to the USAID project. A breakdown of these expenses can be found as part of Annex 4. At the present time it is not anticipated that these continuing costs will be passed on to the beneficiaries; this expense, therefore, is also a significant, though unmonetized, host country contribution. Preliminary site selection for this project indicates a need for approximately 25 acres of land. It is anticipated that the GOM will provide 50% as a host country contribution to the project. This land has received a preliminary evaluation of $500,000 (Rs 3,750,000).

II.E.3. Technical Assistance

One technical advisor and a series of short term technical assistance missions are proposed to help with the implementation of the HG program and to lay the institutional foundation for further low cost shelter development.

A housing implementation specialist with a background in architecture or engineering will be required for 24 months to assist the housing group within the Town and Country Planning Division of the MHL with the implementation of the project and to train counterpart Mauritian staff. The expert will work closely with MHL officials in the implementation of core housing and site works through site supervision, quantity control and project financial management. Work will also be done with the MHC to develop effective procedures for construction inspection and disbursement on individual construction loans. The expert will aim at establishing an effective working relationship between the MHL and the MHC. The expert will also be particularly concerned with program

monitoring and implementing any required changes in the later stages of the program based on the first year's experience.

Short-term technical assistance may be provided as appropriate in three critical areas. First, assistance may be made available to the MHL to refine and coordinate long-term shelter programs for the public and private sectors within the overall national physical planning framework. This long term program function may include a review of the roles of the public agencies in the housing sector (i.e. MHL, MHC, and CHA). Second, appropriate assistance may be provided MHC to computerize its bookkeeping and collections system to help it cope with the rapid increase in volume of accounts. Other assistance may also be provided MHC as required including assistance on alternative lending mechanisms such as graduated payment mortgages. Third, financial services may be provided MHL to review the general practices and procedures of the Ministry's operating division.

II.F. Important Assumptions

The success of the project will depend ultimately on several important assumptions. The most important is that the GOM maintain its recent policy initiatives to increase the production of low income shelter with affordable standards and economic sales terms.

The success of the project will also depend on the ability of the MHL and the MHC to acquire the additional qualified personnel needed. The MHL and the MHC will also have to establish an effective arrangement for working together in project implementation. The MHL will have to acquire the necessary sites with available public services (water and electricity), which are, at the same time, near existing community facilities (schools, health clinics and markets).

The MHC should continue to provide adequate financing for middle income families. Failure to do so could lead to a middle income housing shortage. The resulting market pressures could reduce the availability of new low cost housing to low income groups.

II.G. Other Donor Activity

Both the World Bank and the European Development Fund are currently planning projects for the shelter sector in Mauritius. The World Bank is tentatively planning a project of 3,000 units to be financed over a 4-year period beginning in 1980. Six hundred-and-three units will be built in the La Tour-Koenig area of Port Louis near a large industrial estate. The remainder will be made available to individual households to construct or improve housing for amounts up to $6,666 (Rs. 50,000) per unit. The project will also include the upgrading of infrastructure systems in Port Louis and some nearby municipalities.

Planning and detailed engineering for the La Tour-Koenig site is being undertaken by the Town and Country Planning Division of the MHL in collaboration with the Mauritius Housing Corportation. Loans for housing at La Tour-Koenig as well as for individual home construction and improvement will be managed by th MHC. About 60 percent of all the housing credits will be made available to households with monthly incomes under $160 (Rs. 1,200); 30 percent will be earmarked for households in the $160 - $320 (Rs. 1,200 to Rs. 2,400) monthly income range.

The European Development Fund is planning a $4.4 million housing loan for households with monthly incomes below $160 (Rs. 1,200). Part of the program will consist of about 500 serviced sites with expandable core houses at an average cost (house plus infrastructure) of $3,333 (Rs. 25,000). Primary responsibility for planning and implementation of the sites and services/core housing component will rest with the MHL. The second part of the program will consist of about 510 individual loans averaging about $3,333 (Rs. 25,000) for households who already own land. The individual loans will be channeled through the MHC which will manage collection for all loans under the program.

The Ministry of Economic Planning and Development and the Ministry of Finance coordinate foreign loan assistance. For the housing sector, this is done in collaboration with the MHL. It is felt that the total units planned under the World Bank, the EDF and the proposed AID/HG loan programs for the 1980-84 period will be manageable. Sufficient demand exists and the amount of public housing expenditure can be maintained below the $13.3 million (Rs. 100) million per year limit of the stabilization budget (see Section III-A-1). Public production capacity will be challenged, but planned production will not greatly exceed levels already achieved in previous high standard, high subsidy programs. Although other donors' loans will probablycarry lower interest than the HG loan, (currently estimated to be 1% under EDF and 9.75% under IBRD) the MHL and the MHC plan to equalize on lending rates to beneficiaries at 12 percent to avoid subsidies and confusing discrepancies between programs. This rate has been used to calculate the affordability of the proposed HG program.

III. PROJECT ANALYSIS

III.A. Economic Analysis

III.A.1. Overview of the Mauritian Economy

The economy of Mauritius historically has been dependent on the production and export of sugar. In recent years, sugar has constituted about 85 percent of exports and 60 percent of gross domestic product. In the early 1970s, the price of sugar rose to high levels which led to a rapid growth in GDP of about 8 percent per year. In 1976, however, the world price of sugar fell dramatically and at the same time cyclone Gervaise destroyed about one-third of the sugar crop. Sugar earnings declined rapidly in that year. Since then the Mauritian economy has entered a period of slower growth and economic retrenchment.

In order to reduce the country's dependence on sugar earnings and to increase employment, the GOM has encouraged the establishment of export processing industries. This policy has been quite successful. During the 1972-78 period, about 20,000 new manufacturing jobs were created, but since 1978 growth in this sector has also stagnated due to increased overseas competition and increasing costs of production.

During the sugar boom years prior to 1976, the country's balance of payments was in surplus, but since then it has fallen into deficit. The current account deficit rose from about 6 percent of GDP in 1976 to 12 percent in 1978. At the same time, the government budget has fallen into serious deficit, rising to a level of $129 million (Rs. 968 million) or almost 40 percent of government expenditure in 1978. This has been largely due to decreases in revenue related to decreased sugar earnings and the inability of the GOM to decrease social and development expenditures from pre-1976 levels. The government provides many food subsidies and a wide range of social services which were originally extended during the sugar boom years but which are no longer affordable.

The government deficit has been financed largely with extensions of domestic credit from the banking system. This, together with higher prices on most imports, has contributed to pressure on the price level. The CPI rose by about 19 percent from 1977 to 1978.

Together with the IMF, the GOM initiated an economic stabilization program in late 1979 which included a 23 percent devaluation, increased government revenues, slower domestic wage increases, and a gradual phasing out of many government consumption subsidies. The capital has also been reduced. A ceiling of $13.3 million (Rs. 100 million) per year has been placed on government-supported housing investment (including MHC loans) for the next two years. Nonetheless, it was realized that balance of payments deficits and government budget deficits will continue for the immediate future while the necessary economic reforms are being implemented. During this period, the government is endeavoring to finance a greater part of the budget deficit from abroad to relieve the pressure on domestic credit and to alleviate the current account deficit.

II.A.2. Public Debt Level and Service Ratios

Total debt outstanding rose by 62 percent between December 1977 and June 1978. Much of this change was due to a Eurodollar loan of U.S. $37 million made by the GOM to finance the growing balance of payments deficit. Nevertheless, external debt servicing has remained manageable. Service payments on public and private debt amounted to only about 4 percent of exports in 1977 and probably rose to about 5 percent in 1978 with the Eurodollar borrowing. The GOM is aware that it must continue to finance deficits from abroad until stability is restored, but it is seeking to raise longer term loans and to minimize medium term borrowing in order to limit the debt service burden during the immediate future.

Amortization of the proposed Housing Guaranty loan would not add significantly to the country's overall debt service burden. The proposed loan would increase the amount of annual debt servicing by only about .03 percent of 1977 merchandise exports (the last year for which data is available).

III.B. Social Analysis

III.B.1. Socio-Economic Mix in Mauritian Neighborhoods

The population of Mauritius is very diverse, both ethnically and culturally. Mauritians describe themselves as "one of the most cosmopolitan societies in the world." At least 18 different languages are spoken on this small, crowded island, of which the major ones are Hindi, French, English and Chinese. Two linguae francae — Creole and Bhojpuri (which has been described as a kind of "Hindustan Creole") — facilitate general communication. The population may be broadly divided into the following ethno-religious categories: Indo-Mauritians (Mauritians of Indian origin); and the "general population" comprising Creoles and Franco-Mauritians; the Muslims and the Chinese.

On the whole, these diverse groups live peaceably in mixed communities and — owing to the shortage of residential land in Mauritian towns — in very close proximity with each other. There is little evidence of rigid stratification of neighborhoods by socio-economic class or ethnic origin, although there are higher income neighborhoods and some communities which are predominantly inhabited by a particular ethno-religious group. For example, the Plaines Vertes area of Port Louis is mainly inhabited by Muslims while Triolet, a large village to the Northwest of the island, is populated mainly by Hindus. However, many urban neighborhoods display a very considerable "mix" in terms of the ethnic, cultural and economic backgrounds of their inhabitants which is striking in comparison with the more segregated patterns found in many other developing countries.

Some inter-community problems have occurred in the past. Because of this, the GOM views with disfavor any tendency towards residential "communalism." In the past, the large CHA estates have not been successfully integrated into surrounding neighborhoods. The government is anxious to avoid the creation of large,

new and physically monotonous communities of urban poor (of whatever ethnic group) dislocated from their traditional residential areas and unintegrated into the community in general.

The proposed project will support the aims of the GOM and the established patterns of residence in Mauritius by developing sites with an average of 25 plots per site and no more than 25 core houses per site. These site sizes have been determined after carefully considering the trade-off between the GOM's social objectives and the additional costs of construction on larger numbers of sites. The proximity of the sites to existing public facilities and services will help to reduce costs and facilitate the rapid integration of beneficiaries into existing communities. In addition, some social mix will be achieved within the project areas by offering a number of shelter alternatives to range of income groups. In the case of the proposed individual home construction loans, beneficiaries will usually already be integrated into the communities where their plots are located.

Women, as well as men, are guaranteed fundamental freedoms under the constitution. However, inheritance and property ownership are complicated by the co-existence of various forms of marriage.

There are two major forms of marriage — religious marriages (according to Hindu or Moslem custom, for example) and civil marriages, of which there are again two forms. Religious marriages are not recognized under the law of Mauritius; however, it appears that the majority of rural women are so married (no exact figures exist, as such marriages are not registered).

Spouses married under a civil marriage contract of "separation of goods" (separation des biens) are legally entitled to own and dispose of personal property as they see fit. Under a civil marriage contract of "community goods" (communate des biens), a woman cannot buy or dispose of property after marriage without consent of her husband. Nowadays, increasing numbers of young couples are choosing to be married according to the "separation of goods" civil form which also makes it easier for women to own and operate businesses.

The implications of this for housing loans are that women married under "community goods" must be co-signatories to the loan, and their incomes (if any) are automatically considered for purposes of the size of the loan. A wife married under "separation of goods" must be co-signatory to a mortgage application if her income is to be considered.

Single women (including divorcees and widows) may own property and contract loans in their own right. The Mauritius Housing Corporation has granted loans to women for housing purposes, but to date these are rather few. The proposed Housing Guaranty Program will attempt to ensure that women applicants who meet housing allocation criteria set forth under this program are considered equally with men.

III.B.2. Social Acceptability of the Core House Concept

Most government supported housing projects in Mauritius have involved high standards which were financed with high levels of subsidy. Therefore, there was initially some concern that core housing would fall short of many people's expectations and would not be marketable. However, the AID/MHL prototype market survey has shown that most people will accept core houses and are willing to extend them with their own resources.

An overwhelming 89 percent of visitors interviewed stated that they would like to have a core house. Ninety-nine percent of this group stated that they were willing to pay the costs of such housing and 81 percent of those who liked the core houses said they were willing to use their savings to purchase or extend a core house.

One factor behind the high preference for core housing appears to be the trend towards nuclear family living. Many younger couples are currently living with their parents and would like to set up separate households. About 30 percent of the respondents to the survey said they were not presently living in their own or rented accommodations. This group is believed to be mainly living with parents or relatives. Core housing is especially appropriate for these young couples who can extend the houses gradually as their families expand.

The supposition is further supported by the survey statistics — families tended to be young (71 percent of all household members were under the age of 30 years, with 35 percent under 16 years) and not large (average family size was 4.6) while respondents' average age was 34. There is also evidence to suggest that older respondents were searching for accommodation for their grown children.

During the market survey, visitors were given the chance to express their opinions of the prototype core housing and many informal discussions were held between survey staff and the public. While the core units and their associated costs were generally acceptable, the following comments were most frequently raised about the design of the houses:

- Most people would prefer two rooms rather than one for bed/sitting dining purposes and would be willing to forego the verandah in order to extend available space.

- The kitchen, bathroom/shower and toilet should be clearly separated from each other, and access between food preparation and personal ablutionary facilities should be separate.

- The units should be reinforced, if possible, for vertical expansion.

The comments reflect trends in family structure and Mauritian social and cultural preferences in living styles. A 2-room house suits Mauritian preferences for privacy between parents and children, while the possibility of expansion allows for separation of children by sex as they grow older and for accommodation of parents (or other older relatives) when it becomes necessary. Allowance has been made for the preferences expressed by Mauritians in the proposed core house design.

Mauritian visitors to the demonstration sites also expressed concern about the land area available for gardening. As a result, care will be taken to site core units to maximize the garden area available to each family.

III.B.3. Spread Effects

Two important types of spread effects will be achieved by the proposed project. First, the project will contribute towards the increased social acceptability of lower standard, more affordable shelter solutions. The AID/MHL prototype core housing survey has already had a major influence in educating the Mauritian public about future trends in government sponsored low income housing projects. It is helping low income groups to accept the necessity of lower standards and economic costs. One of the major successes of the demonstration project has been the achievement of a feeling of participation in the planning process by potential Mauritian beneficiaries who are aware that the project has been modified to accommodate their expressed preferences.

Second, with the implementation of this project individual self-help informal construction will be given a strong impetus from the formal sector. Small scale self-help construction and the use of small contractors is common practice throughout Mauritius for home extension and improvement. The wide practice of reasonably high quality small scale construction is due in part to the generally high levels of skills and literacy of the population and the seasonal nature of sugar production which gives much of the labor force time for self-help and informal construction.

To the social spread effect of increased self-reliance will be added a substantial economic spread effect as demand grows for small-scale building contractors (where households are unable to draw on the help of family and friends to construct or improve their dwellings), masons, carpenters, glaziers, laborers and other skilled or unskilled tradesmen associated with the construction industry. The small scale informal sector will also be strengthened by the tendering of contracts for the construction of core houses to local contractors, the small size of the proposed sites being particularly appropriate in this case.

III.C. Technical Analysis

III.C.1. Site Characteristics

The following physical, planning and economic criteria have been developed to identify sites for core housing and serviced sites:

a. The site should already be served with water and electricity. This is important because of the present lack of financing for most new infrastructure throughout the country.

b. The area should be zoned for residential development and be near exisiting residential areas.

c. As far as possible the site should not be adjacent to existing CHA housing estates so that it can be more easily integrated into existing communities than has been the case with most CHA estates.

d. The majority of the sites should be in one of the five municipalities or in one of the three designated growth poles.

e. Schools and/or bus stops should be within walking distance of the site (less than one mile).

f. Existing or planned employment opportunities should be nearby.

g. The site should not have grades of more than 10 percent and should be well drained.

h. The site should have a minimum area of one-half acre and not cost more than $40,000 (Rs. 300,000) per acre.

i. Preference should be given to sites which meet the foregoing criteria and are easily available (e.g. already owned by government, or by large sugar estates willing to sell.)

Using these criteria, 20 sites have been tentatively identified for the first year of the program (see Table III-1). MHL officials are beginning the land acquisition process which should take about six months. During this first year of the program, the MHL will use the same criteria to identify and acquire an additional 20 sites for the second year of the program. Most sites selected to date are urban infill sites, in or near existing residential areas. Most of the sites are in the major urban corridor between Port Louis and Curepipe. The other sites, however, are located in areas designated by the National Physical Development Plan as growth poles for secondary urban centers. The sites range from 0.5 acres to about 1.25 acres. All of the sites have access to off-site water and electricity.

Before AID gives its final consent to the sites selected for the HG program, RHUDO and MHL will jointly review the sites with particular regard for suitability in the event of extraordinary wind or rain such as would occur during a cyclone. During this review, the following comments taken from the "Initial Environmental Examination" for the Mauritius Shelter Program will be borne in mind: "In physical terms, the leeward side rather than the windward side is the preferred location for housing construction. Existing urbanization choices support this environmental recommendation. The capital of Port Louis and most of the other towns are partially protected from the impact of the cyclones by the central highlands. Sites that are in particularly sheltered spots, by means of local topographic features, would be more favorable than sites without any topographic obstruction to the passage of cyclones. At the same time, special site design features such as windbreaks made out of casuarina trees are worthy of consideration." Sites should also be examined for potential flooding hazards in the event of severe storms.

TABLE III-1

Site Evaluation for Mauritius Shelter Program

Location	Estimated Area (acres)	Location Designation	Access to Infrastructure: Water	Access to Infrastructure: Electricity	Access to Infrastructure: Roads	Access to Transportation	Access to Schools	Access to Employment	Physical Characteristics: Slope	Physical Characteristics: Drainage	Ownership	Remarks
Rose Belle		Growth role										
I	1.0		On-site	On-site	Main rd.	Bus route	½ mile	Sugar estate	Flat		Sugar estate	
II	1.0		"	"	"	"	"	"	"		"	
III	0.75		"	"	"	"	"	"	"		"	
Vacoas-Phoenix		Municipality										
Highlands I	0.75	"	On-site	On-site	Main rd.	Bus route	0.75 mile	Sugar estate	Flat	Stream	Sugar estate	0.75 mile from main road
Highlands II	0.50	"	"	"	"	"	"	Vacoas-Phoenix	"	Drainage	Sugar estate	
Highlands III	1.0	"	"	"	"	"	"		"	Canal	Private	Vacant land
Curepipe		Municipality										
I. Textile factory	1.0	"	On-site	On-site	Main rd.	Bus route	1 mile	Curepipe	Approx. 10%	Streams	Gov. land	Require clearing in mixed income area.
II. Eucalyptus plantation	0.75	"	"	"	Secon. rd.	Bus route	½ mile	Curepipe	Flat	Existing canals	Gov. land	
III. Alle Brilliant Gov. School	1.0	"	"	"	"	"	Adjacent	Curepipe	"	"	Private (theirs)	Rocky site -- clearing difficult
IV. Near Dodo Club	1.0	Municipality	"	"	"	"	"	Curepipe	"	Existing	Private (theirs)	Near school playfield
Beau Bassin/ Rose Hill												
I. Mont Roches	0.75	Municipality	On-site	On-site	To be verified	To be verified	To be verified	Rose Hill/ Beau Bassin	To be verified	To be verified	Sugar estate	

TABLE III-1 (continued)

Site Evaluation for Mauritius Shelter Program

Location	Estimated Area (acres)	Location Designation	Access to Infrastructure			Access to Transportation	Access to Schools	Access to Employment	Physical Characteristics		Ownership	Remarks
			Water	Electricity	Roads				Slope	Drainage		
II. Plaisance	1.0	Municipality	On-site	On-site	To be verified	To be verified	To be verified	Rose Hill/ Beau Bassin	To be verified	To be verified	Gov. land	
III. North	1.0	"	"	"								
Quartre Borne												
I. Boundary Road	1.0	Municipality	Within 300 ft.	Within 300 ft.	Sec. rd.	Bus within ½ mile	Within ½ mile	Quartre Borne	Flat	To be verified	Private	Disputed vacant land
II. [illegible] area (Palm[illegible] Junction)	1.0	"	On-site	On-site	Main rd.	Bus routes	Within ½ mile	"	"	Along road	Private	Vacant
III. Belle Rose Ave.	0.75	"	"	"	"	Local bus route	Within ½ mile	"	"	To be verified	Government	Vacant
IV. Bonsauer Jneur Lane	1.0	"	600 ft.	200 ft.	"	---	Within ½ mile	"	"	"	Private	"
Quatre Militaire	1.0	Growth pole	On-site	On-site	Main rd.	Bus route	Within ½ mile	To be verified	Gentle slope	Along rd.	Government	"
Goodlands	1.25	Growth pole	On-site	On-site	Main rd.	Bus route	To be verified	Goodlands	To be verified		To be verified	
Mahebourg	1.0	Secondary urban center	On-site	On-site	Main rd.	Bus route	Within ½ mile	To be verified	Flat	To be verified		Near airport and sugar estate

NOTE: Site selection and evaluation is ongoing. Additional sites are being sought in Port Louis and other urban areas in the event detailed evalution indicates some of the above sites are unsuitable for the project.

III.C.2. Planning Standards

The standards proposed for site layouts, infrastructure and core house construction have all been designed to be affordable to the target groups. This is in sharp contrast to previous housing programs in Mauritius which have combined expensive standards with large interest and capital subsidies.

Government sponsored housing projects, including low cost housing sponsored by the MHC, are exempt from building regulations of local government with respect to room size, ceiling height, etc. However, regulations governing house setbacks on plots must be observed.

Because most of the sites will be in urban infill areas and can profit from off-site community facilities and open space, on-site land can be used quite efficiently. An average of 40 units is planned per acre. Residential area will comprise about 90 percent of total site area. A typical site will contain about 25 plots. A minimum 5-10 foot wide planning reserve will be provided to separate developments from main roads. Plots will be planned in simple cul-de-sac layouts with 10 foot wide footpaths providing individual plot access.

On-site infrastructure will consist of individual water and electricity connections. Sanitation will consist of improved pit latrines connected to water seal toilets (commonly called aqua-privies). These function well in Mauritius due to high absorptive capacity of the soil.

The proposed core houses will be semi-detached units with 264 square feet. They are similar to the core houses preferred by the public in the AID/MHL survey, but the design has been improved in accordance with comments received during the survey.

The proposed planning standards are presented in detail in Annex 5, Technical Standards.

III.C.3. Program Components

The breakdown of the proposed program is shown in Table III-2, Mauritius Shelter Program.

Program Components:

a. Core houses. Core houses of 264 square feet are proposed to be built on plots of 900 square feet (see Type I in Annex 2). In accordance with preferences noted in the AID/MHL survey, the core house will contain a small sitting room and a small bedroom, each of 80 square feet, rather than the one large sitting/bedroom built in the prototype survey unit. Separate water-seal toilet and bathing enclosures will also be provided in addition to a separate kitchen. The structure will be designed as a semi-detached unit suitable for expansion. It will be reinforced sufficiently for the addition of a second story.

The proposed core house is affordable to households at the 50th income percentile. The MHL has decided to build only one type of core house during the first phase of the program in order to simplify the program and to test the initial acceptability of core housing. However, a second core house of 214 square feet has been designed for 800 square foot lots which would be affordable to households at the 35th income percentile. The MHL has agreed to consider this smaller unit for the second year of the program after further analysis of the market acceptability of core housing.

b. Serviced plots. Two plot options have been developed to meet the needs of households above the 25th percentile. The first, aimed at the 25th to the 30th percentiles, would have an area of 900 square feet. It would be similar in size and level of infrastructure service to the plots to be provided with core houses. In this case, construction loans of $1,867 - $2,300 (Rs. 14,000 to Rs. 17,250) will be provided.

The second plot option will have an area of 1,050 square feet and be targeted to households in the 30th to the 50th percentiles. Building construction loans will be provided of $2,100 — $2,800 (Rs. 15,750 to Rs. 21,000).

The MHL and the MHC will provide prospective homeowners with plans of detached units which can be built on each plot type. The MHC will have the primary responsibility for construction inspection and loan disbursement for construction loans (see Section III.D. 2). It can also provide limited technical assistance for self-help construction.

The number of plot options for both the core houses and the serviced plots have been limited to simplify the planning and implementation of the program due to the number of sites involved. However, during preparation of the second phase of the program, modifications in the composition of the program could be made to meet the market preferences determined during the first phase. When the sites for the first phase are acquired and surveyed, the various plot and core house options can be mixed together on the same site to provide a more diverse community structure and to accommodate the physical features of the site.

c. Home construction loans. The final component of the program — home construction loans for persons already owning or leasing plots — is aimed at households from the 20th to the 50th income percentiles. Based on the market survey, the average size of the loans is anticipated to be about $4,000 (Rs. 30,000). These loans could be used to construct housing on vacant rural or urban sites within the limits of income and other beneficiary selection criteria.

As with construction loans to the recipients of serviced sites, the MHC will take primary responsibility for construction, inspection and disbursement. This component will be limited initially to 500 units during the 2-year period, but the target for the second year can be adjusted to meet market conditions.

TABLE III - 2

Program Components: Mauritius Shelter Program

Program Component	Percentile Income Group Served (%)	Average Unit Cost or Loan Size (US $)	Number of Units or Loans
1. Core Houses (Type I)	50th	$4,211 (Rs. 31,588)	500
2. Serviced Plots			
(Type I)	25th-30th	$3,420 (Rs. 25,648)	300
(Type II)	30th-50th	$4,087 (Rs. 30,656)	200
3. Home Construction Loans	20th-50th	$4,000 (Rs. 30,000) (avg.)	500
TOTALS			1,500

III.C.4. Use of Local Building Materials and Appropriate Technology

Most basic building materials used in Mauritius are imported, since Mauritius has very few natural resources from which it can manufacture building materials. The primary local materials used are sand and aggregates. However, the project will use many additional materials which are locally processed such as concrete blocks, metal window and door frames and locally assembled doors. As a result, the imported component of construction will be about 38 percent of total construction costs. Traditional labor intensive methods are used by small and large contractors. The individual building loans which will be granted for serviced plots and home construction will generate self-help and self-contracting activities by project beneficiaries. This will

generate employment for many small construction firms and informal sector builders.

III.D. Administrative Analysis and Plan

III.D.1. Shelter Agency Background

The Ministry of Housing, Lands and Town and Country Planning (MHL) is the key public sector actor in the shelter sector. The Valuation Division is responsible for the valuation and acquisition of sites. The Survey Division is responsible for surveying all new government land. The Town and Country Planning Division is responsible for advising central and local governments on land use issues and preparing outline land use plans; for selecting sites and designing site layout for public low income housing programs and for implementing for specific housing projects.

The Ministry's role in special low income shelter projects has expanded rapidly during the last few years. In addition to site selection and acquisition, it is directly involved in the planning and implementation of the World Bank and the EDF low cost housing programs. To date these activities have taken place within the Town and Country Planning Division, but as the number of special projects continues to increase, the government is considering a Housing Unit within the MHL. This suggestion was made in the AID Shelter Sector Assessment and has been promoted since then by AID and the World Bank. It is also important because of the need for the Ministry to assume more direct control over housing policy formulation.

The Mauritius Housing Corporation (MHC) is a self-sufficient parastatal organization under the Ministry of Finance. It borrows and lends for housing purchase and construction. As a largely commerical operation, the MHC has to be and is operationally efficient. Until recently its activities were concentrated on middle and upper income households, but recently it has shown an increasing commitment to loan programs for lower income groups. The present MHC policy is to support a lowering of housing standards so that housing can be more affordable to low income groups.

As of June 30, 1979, the MHC had total mortgage assets of over $17.73 million (Rs. 133 million) representing 4,522 outstanding loans. Delinquent accounts were negligible, amounting to only 0.034 percent of mortgage assets at that time. The MHC approved 631 mortgage loans during the 1978-79 fiscal year for an average amount of $7,428 (Rs. 55,707), a reduction from the 1977-78 average of $7,876 (Rs. 59,070). Thirty-five percent of loans were issued to families with monthly incomes of less than $200 (Rs. 1,500).

Present MHC interest rates to borrowers are 12 percent for lower income households and 14 percent for higher income households. Loans are collected over a 20-25 year period. The MHC currently benefits from an interest spread of 1.5 percent which is sufficient to cover costs.

The MHC has had a major role in the Gervaise reconstruction program. Under a second program financed with government loans and grants, MHC had built 503 units by the end of 1979 for Gervaise victims and another 186 units were under construction. With its entry into the Gervaise program and with the tightening of credit from the Ministry of Finance for upper and middle income housing, the MHC is beginning

to serve lower income groups. In addition to providing individual mortgages, the MHC has been more directly involved in financing a number of new housing developments. In the World Bank and the EDF low-cost housing programs the MHC will be playing a key role in both mortgage servicing and construction loan administration.

III.D.2. Project Administration Plan

Under the proposed loan program, the Mauritius Housing Corporation (MHC) will be the primary channel of loan funds and the administrator of loan collections. Loans will be drawn from the U.S. lenders by the Ministry of Finance and passed on to the MHC. In the case of individual home construction loans and construction loans for houses built on serviced sites, the MHC will deal directly with beneficiaries, supervising their individual home construction and providing loan disbursements at specified times during the construction process. The majority of MHC's mortgage loan operations to date have been of this nature.

When individuals solicit loans, formal loan approval usually takes two to three months but informal authorizations can be given earlier. Individual home construction is usually inspected at six or seven stages during the construction process. The early stages of construction are usually paid from beneficiaries' savings and pending formal loan approvals. Many low income borrowers require additional inspections which also serve as informal technical assistance for self-help construction. The Technical Department of the MHC provides prototype plans and helps beneficiaries adapt them to sites for a small fee. The MHC will work with the MHL to assure that adequate prototype designs are available for this project.

In the case of core housing and serviced sites, the MHC will not be directly involved in the planning and construction process. The MHL will take the primary development initiatives, as described below. MHC will provide disbursements to builders, but the MHL will have the primary responsibility for design and supervision. This will require a formal agreement between MHL and MHC concerning drawdown procedures and authorizations, construction inspection and beneficiary selection.

The MHC will be responsible for all loan collections under the proposed program. The MHC is proposing that its current 1.5 percent loan spread be increased to 2.5 percent to allow for the higher costs and greater risks of a low income lending program. AID will analyze this request in greater detail when the implementation agreement is negotiated and detailed lending rates for the program are established.

Because of a lack of capital for long-term mortgage financing, MHC only authorized 631 loans during FY 1978/79. Its current staff is working considerably below capacity. Management feels that present staff could handle 1,000 to 1,200 loans per year. However, MHC lending under the proposed AID and other foreign loans may reach somewhat over 2,000 loans per year.

MHC already has government authorization for 28 new staff positions which could be paid for from the proposed 2.5 percent interest spread. It is preparing a detailed manpower plan to determine additional staff requirements under all of the proposed loan programs.

The staff needed to implement the proposed Housing Guaranty program and other special programs have been discussed with the Ministry but actual plans to recruit these staff have not been finalized. AID will have to monitor professional staff development as the project develops to ensure that MHL has sufficient capacity to execute the project. The Ministry expects to benefit from technical assistance in the form of a quantity surveyor from the Overseas Development Ministry of the U.K. and an engineer from Commonwealth Development Funds.

The MHL will be responsible for site selection, design and construction supervision for the core houses and serviced sites. Arrangements for financial disbursements will be stipulated in a formal agreement with the MHC. This division of labor involving a working relationship between the MHL and the MHC has already evolved for other special low income projects.

The Central Housing Authority (CHA) is the parastatal organization under the Ministry of Housing which has traditionally dealt with public sector housing programs. It has been the principal agency in charge of the execution of the Gervaise program. However, only about 2,000 Gervaise units had been completed by the end of 1979 out of a target of 7,000 during a 3-year period. The CHA has recently been audited by the government auditor who has made a number of suggestions towards its improvement.

It is not anticipated that the CHA will have a direct role in the project at this time. Nevertheless, after discussion with the GOM it was agreed that partial CHA participation might be considered at a later date especially with regard to carrying out some of the construction activities. In order to comply, however, it is suggested that CHA would have to comply with the requirements set forth in the relevant section of Annex 5.

III.D.3. Post Implementation

Following execution of the project, the MHC will be in charge of loan servicing and repayment. Most of MHC's loans are now being collected by payroll deductions. This system will be used wherever possible for the proposed project. MHC also accepts repayments at its office through "bank standing orders" whereby automatic deductions are made from savings accounts and remitted to MHC. In addition, MHC is studying the possibility of using mobile vans for collections or of using the State Commerical Bank as a collections agent.

Since all the shelter solutions will be offered for tenant purchase, the primary estate management function will be the responsibility of the allottees. Nevertheless, the GOM has agreed to clearly delineate institutional responsibility in the Project Delivery Plan for the monitoring of the condition of public areas and coordinating services such as refuse collection, grass cutting, clearing of drains, and repairs to water pipes, sewers and roads. It is anticipated that all tenant purchase agreements will be executed by the MHC on behalf of the GOM, and therefore, it will have primary enforcement responsibility, including evictions and dealing with tenant complaints under the agreement.

III.E. Financial Analysis

III.E.1. Project Costs

The total cost of the project is calculated to be approximately $7.5 million of which amount $6 million will be HG financed. A breakdown of project financing by sources and components is listed in Table III-3, Estimated Total Costs, Mauritius Shelter Program.

III.E.2. Shelter Solution Cost Recovery

Capital cost recovery of the HG financing for shelter solutions will be by means of the monthly mortgage repayments made by the beneficiaries. The MHC uses payroll deductions where possible, but it is considering additional mechanisms for this lower income shelter project (see Section III.D.3.).

Costs are presently recuperated by the MHC from lower income persons on the basis of level payment mortgages at 12% for 25 years. These terms have been used to calculate the affordability of the proposed project. However, the MHC has agreed to consider the possibility of graduated payment mortgages. Within the limits of appropriate cash flow, this system could be considered for a part of the HG loan, especially for some of the lowest income groups.

III.E.3. Costs of Loan Administration

The MHC presently earns a spread of 1.5% between its costs of borrowing and on lending to tenant purchasers to cover the costs of loan administration. A spread of 2.5% has been proposed by MHC for its new low income shelter projects including this HG loan. Even though the MHC has expressed a willingness to cut its loan administration fee to whatever level is determined to be reasonable and economic by the GOM and AID in the Implementation Agreement, best efforts will be made to arrive at a fee which matches the actual MHC costs.

III.E.4. Cash Flow

As the various components are more fully developed in detail, a Master Project Delivery Plan, including cash flow, will be prepared. Each project component has been structured to ensure initial positive cash flow at all times after completion of development.

TABLE III - 3

Estimated Total Cost

Mauritius Shelter Program

	Cost/Unit (Rs. 000)	1981 No. of Units	1981 Cost (Rs. 000)	1982 No. of Units	1982 Cost (Rs. 000)	TOTAL PROGRAM No. of Units	TOTAL PROGRAM Total Cost (Rs. 000)	TOTAL PROGRAM Total Cost (US $000)
1. Core Houses								
Land	7,000	250	Rs. 1,750	250	Rs. 1,750	500	Rs. 3,500	$ 467.
Infrastructure	639		160		160		320	43.
Site works	1,509		377		377		754	100.
Core houses	22,440		5,610		5,610		11,220	1,496.
TOTAL	31,588		7,897		7,897		15,794	$2,106.
2. Serviced Plots								
Type I								
Land	7,000	150	1,050	150	1,050	300	2,100	$ 280.
Infrastructure	639		96		96		192	25.
Site works	1,509		226		226		452	60.
Construction loans (avg.)	16,500		2,475		2,475		2,950	660.
TOTAL	25,648		3,847		3,847		7,694	$1,025.
Type II								
Land	8,161	100	816	100	816	200	1,632	$ 218.
Infrastructure	739		74		74		148	20.
Site works	1,756		176		176		352	47.
Construction loans (avg.)	20,000		2,000		2,000		4,000	533.
TOTAL (avg.)	30,656		3,066		3,066		6,132	$ 818.
Individual Construction Loans (avg.)	30,000	200	6,000	300	9,000	500	15,000	$2,000.
TOTAL BASE COSTS			20,810		23,810		44,620	$5,949.
Physical Contingencies on Site Works, Infrastructure and Core Houses (15%)			1,008		1,008		2,016	$ 269.
Price Contingencies on All Items (10% in 1981; 20% in 1982)			2,182		4,964		7,146	$ 953.
Project Development and Implementation - design and administrative costs			1,125		1,125		2,250	$ 300.
Total Program Costs (Millions Rupees)			25.1		31.0		56.0	
Total Program Costs (Millions US $)			3.4		4.1			$7.5

IV. PROJECT IMPLEMENTATION

IV.A. GOM Project Management

Although final details of short and long term project administration and estate management have yet to be agreed upon, the GOM has set forth a series of estate management practices following a recent parastatal review. The tenant purchase housing solutions which comprise this Housing Guaranty project will place the primary burden of estate management upon the homebuyers themselves. The GOM will be involved in detailed monitoring activities to ensure that the homebuyers are fulfilling their responsibilities under the respective Tenant Purchase Agreements.

Finally, AID will establish a system whereby the findings of the Regular Annual Evaluation can be transmitted to the appropriate GOM implementing agency. It is believed that this feedback should prove useful to the GOM in modifying some practices and taking remedial action where necessary.

IV.B. AID Project Monitoring

As the proposed project is a significant part of AID's bilateral assistance program to Mauritius, the Regional Housing and Urban Development Office (RHUDO) for East and Southern Africa will make every effort to coordinate all functions with both the American Embassy in Port Louis and the Regional Economic Development Services Office (REDSO), East Africa. Authority for AID reviews and approvals called for in the Guaranty Agreements have been delegated by the Office of Housing (DS/H) to RHUDO.

Technical and environmental reviews of the project will be conducted by short term consultants from the Office of Housing or RHUDO. Similarly, regular financial reviews, as necessary will be scheduled by RHUDO, East and Southern Africa.

IV.C. Schedule of Implementation

THIRD QUARTER CY 1980	RESPONSIBLE ACTORS
1. PP approved; $6 million HG loan authorized; $250,000 DG approved.	AID/W
2. RHUDO and GOM execute PRO/AG for long term resident TA.	RHUDO & GOM

FOURTH QUARTER CY 1980	RESPONSIBLE ACTORS
1. RHUDO and GOM negotiate and sign Implementation Agreement.	MHL, RHUDO, GC/H
2. MHL and MHC negotiate and sign Cooperation Agreement for HG project.	MHL, MHC
3. Long term resident adviser arrives in the field.	AID/W, RHUDO
4. Preparation and approval of Master Project Delivery Plan by MHL/MHC.	MHL, MHC
FIRST QUARTER CY 1981	
1. GOM advertises for and selects US Investor.	GOM, AID/W
2. Parties sign Host Country Guaranty and Loan Agreements.	GOM, AID/W & Investor
3. MHL forms Project Unit and completes site selections, surveys, designs, beneficiary selection procedures, and tender and bidding procedures with appropriate RHUDO inputs and approvals.	MHL, RHUDO
4. MHC begins revision of portfolio accounting system, hires additional staff, and receives approval for higher handling charges.	MHC, GOM
SECOND QUARTER CY 1981	
1. GOM makes first draw on HG loan.	GOM, AID/W, Investor
2. MHL prepares bills of quantities and tender documents for first phase.	MHL
3. MHL advertises for tenders - first phase.	MHL
4. MHL invites applications for first phase serviced sites and expandable core housing.	MHL
5. MHL invites applications for first phase individual home construction loans.	MHC

THIRD QUARTER CY 1981	RESPONSIBLE ACTORS
1. MHL, Tender Board Reviews tenders and with RHUDO concurrence awards contracts for first phase.	MHL, RHUDO
2. Construction begins on infrastructure, serviced sites, and expandable core housing units.	MHL
3. 90 days after first draw MHL submits first Project Progress Status Report (PPSR) to RHUDO and AID/W.	MHL, RHUDO
FOURTH QUARTER CY 1981	
1. MHL and RHUDO agree on mix of shelter types for second phase of program.	MHL, RHUDO
2. MHL selects and acquires sites for second phase with appropriate RHUDO input.	MHL, RHUDO
3. MHL begins design of second phase of program.	MHL
FIRST QUARTER CY 1982	
1. First allottees sign tenant purchase agreements.	MHC
2. First shelter units occupied, additional units occupied every 90 days.	MHC
3. MHL finalizes design drawings and contract documents for second phase.	MHL
SECOND QUARTER CY 1982	
1. MHL invites tenders for second phase of program.	MHL
2. MHL invites applications for second phase serviced sites and expandable core housing.	MHL
3. MHC invites applications for second phase individual home construction loans.	MHC

THIRD QUARTER CY 1982	RESPONSIBLE ACTORS
1. MHL, Tender Board review tenders and with RHUDO concurrence award contract second phase.	MHL, RHUDO
2. Construction begins on second phase.	MHL
SECOND QUARTER CY 1983	
1. Final shelter units completed and occupied.	MHC

IV.D. Evaluation

With the completion cf implementation, the Mauritius Low Cost Shelter project will constitute a major human settlements program. The project will also represent a significant AID effort over time to demonstrate policy and program improvements in the delivery of low-cost shelter affordable by below median income households.

The evaluation of progress in meeting the projected program outputs and major implementation events, as outlined in the Logical Framework, Planned Performance Tracking Network, and the Project Delivery Plan will be recorded during the AID Annual Regular Evaluation. This Evaluation will also note any deviation of the project's actual performance and present a detailed, factual basis for such revisions of the project inputs and outputs as may be necessary.

The GOM/MHL will be required to submit quarterly reports, (the Project Progress Status Reports (PPSR), to RHUDO East and Southern Africa) which indicate success in achieving scheduled targets and identify problems which are inhibiting progress and require immediate attention. Policy issues will also be highlighted in these reports whose resolution the GOM believes may be aided by RHUDO's active participation.

If necessary, RHUDO will call on the services of an architectural and engineering firm under separate contract to make site visits during the construction phase of implementation. It is expected that recommendations on improving technical aspects of the program will result from these inspections and will be transmitted by RHUDO to the GOM for corrective action.

IV.E. Negotiation Status

AID will authorize a HG loan and send a Letter of Advice to the Borrower. When the Borrower is ready, a Notice will be placed in the Federal Register inviting interested Investors to submit loan proposals to the Borrower.

The terms and conditions of the four basic documents of the project guaranty will be negotiated simultaneously.

The legal documents are:

1. The Implementation Agreement between AID and the Government of Mauritius.

2. The Loan Agreement between the U.S. Investor and the Borrower.

3. The Guaranty Agreement between AID and the U.S. Investor.

4. The Guaranty Agreement between the Government of Mauritius and AID.

A Master Project Delivery Plan will be prepared prior to advertising for a lender. It will be updated prior to each disbursement.

AID 1020-28 (1-79)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project:
From FY 1980 to FY 1983
Total U.S. Funding $6 million
Date Prepared: July 15, 1980

Project Title & Number: MAURITIUS SHELTER PROGRAM - 642-HG-001

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: (A-1)	**Measures of Goal Achievement: (A-2)**	(A-3)	**Assumptions for achieving goal targets: (A-4)**
To assist the Government of Mauritius to develop the institutional, technological and financial capacity to provide shelter under reasonable conditions for all levels of society with emphasis on government and private sector actions to meet the needs of families below median income.	1. GOM increases its allocation of resources for coordinated planning and production of low income shelter units 2. GOM/MHC increases its output of shelter units for low income persons 3. Expansion of amount of housing finance available to target population from public and private sources.	1. GOM/MHC financial data and annual reports 2. MHL/MHC official statements and reports concerning shelter 3. Latest GOM census data 4. USAID and technical assistance consultants' annual evaluation reports.	1. Continuing GOM Financial and technical commitment to shelter needs of families below median income 2. GOM pursues shelter policies which produce affordable housing units for low income groups with economic cost recovery 3. An effective market for shelter solutions will exist in spite of sugar commodity price fluctuations and inflation 4. Private sector mortgage finance can be mobilized for some of the target population.

AID 1070-28 (1-78)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project:
From FY 1980 to FY 1983
Total U.S. Funding $6 million
Date Prepared: July 15, 1980

Project Title & Number: MAURITIUS SHELTER PROGRAM - 642-HG-001

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: (A-1)	Measures of Goal Achievement: (A-2)	(A-3)	Assumptions for achieving goal targets: (A-4)
1. To increase the production of low cost, cyclone resistant shelter in Mauritius affordable by families below the median income.	1. Shelter Production 1,500 new shelter units completed with access to infrastructure and long term housing finance and secure tenure.	1a. GOM/MHC project files, construction reports and annual reports. 1b. USAID and technical assistance consultants' annual evaluation reports 1c. GOM/MHC project progress status reports (PPSR).	1a. GOM/MHC carry out host country obligations 1b. Persons within target group willing and economically able to pay for improved shelter and services. 1c. GOM can expand their resource base to meet recurring obligations for increased staffing of MHL/MHC.
2. To strengthen the capability of GOM/MHL to plan, manage, implement and administer large-scale comprehensive programs of shelter with economic cost recovery.	2. Institutional Development a. Develop a group within the Ministry of Housing, Lands, Towns and Country Planning to design, implement and manage comprehensive low cost shelter programs b. Strengthen and expand capacity of MHC to originate and service low income housing construction and mortgage loans through introduction of new staff and financial systems.	Same as above	2a. GOM/MHL accepts need for long term housing planning and programming for low-cost shelter and supports creation of forward planning unit within MHL. 2b. MHC receives permission to expand staff and is able to recruit new personnel and expand revenue base accordingly. 2c. MHC able to increase loan servicing fees to cover costs of servicing greater number of smaller value loans.

AID 1020-28 (1-78)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project:
From FY 1980 to FY 1983
Total U.S. Funding $6 million
Date Prepared: July 15, 1980

Project Title & Number: MAURITIUS SHELTER PROGRAM - 642-HG-001

P-CE3A

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: (A-1)	Measures of Goal Achievement: (A-2)	(A-3)	Assumptions for achieving goal targets: (A-4)
1. Low Income Shelter Solutions			
a. Serviced Plots	1a. Serviced Plots completed 250 completed in 1981 250 completed in 1982	1a. MHL/MHC monthly construction reports	1a. GOM/MHC carry out host country obligations.
b. Expandable Core Houses	1b. Expandable cores houses completed : 250 completed in 1981 250 completed in 1982	1b. GOM/MHC annual reports and records	1b. Suitable sites available at reasonable cost; suitable qualified contractors available.
c. Home Construction Loans	1c. Home construction loans granted: 200 issued in 1981 300 issued in 1982	1c. Technical assistance consultant reports 1d. USAID annual monitoring and evaluation reports.	1c. Effective demand exists for shelter solutions. 1d. Allottees have access to private capital to expand and complete dwellings 1e. MHL/MHC have capacity to implement proposed program; GOM provides budget for additional staff.
2. Increased Employment Through High Labor Content of Construction Activities	2a. Site works and core house construction estimated: 1700 months employment - skilled labor 2700 months employment - unskilled labor 2b. Home Construction loans: 1775 months months employment - skilled labor 4500 months employment - unskilled labor	Same as above	2. GOM permits existing labor intensive technologies to be used. 2b. Allottees use informal sector workers, small scale contractors and local materials encouraging small scale artisans and suppliers.

AID 1020-28 (1-78)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project:
From FY 1980 to FY 1983
Total U.S. Funding $6 million
Date Prepared: July 15, 1980

PAC 3B

Project Title & Number: MAURITIUS SHELTER PROGRAM - 642-HG-001

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: (A-1)	Measures of Goal Achievement: (A-2)	(A-3)	Assumptions for achieving goal targets: (A-4)
3. Creation of Housing Unit Within MHL to Coordinate this Project and Long Term Plan of Action for Finance and Production of Shelter for Low Income Families	3a. Creation of Housing Unit within MHL.	3a. Reports MHL	3a. GOM provides budget for creati of new staff positions in Housing Unit.
	3b. MHL and MHC effectively implementing HG project.	3b. Reports MHC	3b. Agreement executed between MHL and MHC for aspects of HG project implementation.
	3c. Housing Unit within MHL commences long term shelter sector planning including role of private sector.		
4. MHC using Revised, Automated Portfolio and Accounts Management System Especially Designed for Low Income Borrowers	4a. A model program produced and installed at MHC for routine portfolio management and delinquency monitoring.	4. MHC annual report and financial data.	4a. MHC commitment to serve lower income borrowers with appropriate and timely collection procedures.
	4b. MHC able to timely post 2000 monthly loan accounts		4b. MHC's proposed loan spread of 2.5% or satisfactory alternative be approved and found adequate to cover costs of loan servicing.
	4c. HG tenant purchase loan repayment delinquencies do not exceed 5% of total portfolio.		4c. MHC able to recruit new staff with increased revenue.

AID 1020-28 (11-79)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1981 to FY 1983
Total U.S. Funding $6 million
Date Prepared: July 15, 1980

Project Title & Number: MAURITIUS SHELTER PROGRAM - 642-HG-001

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Proj. Inputs: (D-1)	Implementation Target (Type and Quantity) (D-2)	(D-3)	Assumptions for providing inputs: (D-4)
1. HG Loan	1. $6 million Housing Guaranty funds used to finance approximately 500 core houses, 500 serviced plots and 500 home construction loans.	1. USAID annual evaluation reports	1a. GOM executes all HG loan documents in substantially same form presented and within time estimates. 1b. US investor willing to invest at rates affordable by beneficiaries.
2. Local Investment a. GOM Participation b. Allottee Down-Payments and Investment	2a. GOM allocates land 2b. GOM/MHC furnishes necessary administrative and supervisory technical staff and equipment 2c. Allottees provide approximately $670,000 for down-payment and further self help investment.	2a. GOM/MHC annual reports and records	2a. GOM commitment of land and other assistance is provided fully and within time 2b. Effective demand continues as worldwide sugar prices, wages and inflation remains constant
3. DG Technical Assistance	3. $250,000 Development Grant.	3. Same as above, plus technical assistance consultant reports.	3. DG funds can be authorized and technical assistance personnel available.

PLANNED PERFORMANCE TRACKING NETWORK

Events

1. GOM and AID signed Implementation Agreement.

2. MHL and MHC signed Cooperation Agreement for HG project.

3. MHL established Housing Unit.

4. Parties signed Host Country Guaranty and Loan Agreements.

5. MHL Housing Unit completed first phase site selections, surveys, designs, and remaining technical aspects with appropriate RHUDO inputs and approvals.

6. MHL Housing Unit completed drawing up tender and bidding procedures and beneficiary selection procedures with appropriate RHUDO inputs and approvals.

7. MHC revised portfolio accounting system, hired additional staff, and received approval for appropriate new handling and servicing charges.

8. GOM completed Project Delivery Plan (PDP) and made first draw on HG loan.

9. MHL advertised for first phase tenders.

10. MHL advertised for first phase applications for serviced sites and expandable core housing units.

11. MHC advertised for first phase applications for home construction loans.

12. GOM awarded construction contracts for first phase.

13. Construction began on first phase infrastructure, serviced sites, and expandable core housing units.

14. Ninety days after first HG loan drawdown, GOM submitted first Project Progress Status Report (PPSR) to RHUDO and DS/H and thereafter at quarterly intervals.

15. MHL and RHUDO agreed on mix of shelter types for second phase of program.

16. First phase allottees signed Tenant Purchase Agreements.

17. First phase shelter units occupied, additional units occupied every 90 days.

18. MHL invited tenders for second phase.

19. MHL advertised for second phase applications for serviced sites and expandable core housing units.

20. MHC advertised for second phase applications for individual home construction loans.

21. GOM awarded construction contracts for second phase.

22. Construction began on second phase infrastructure, serviced sites and expandable core housing units.

23. Second phase allottees signed Tenant Purchase Agreements.

24. Second phase shelter units occupied, additional units occupied every 90 days thereafter.

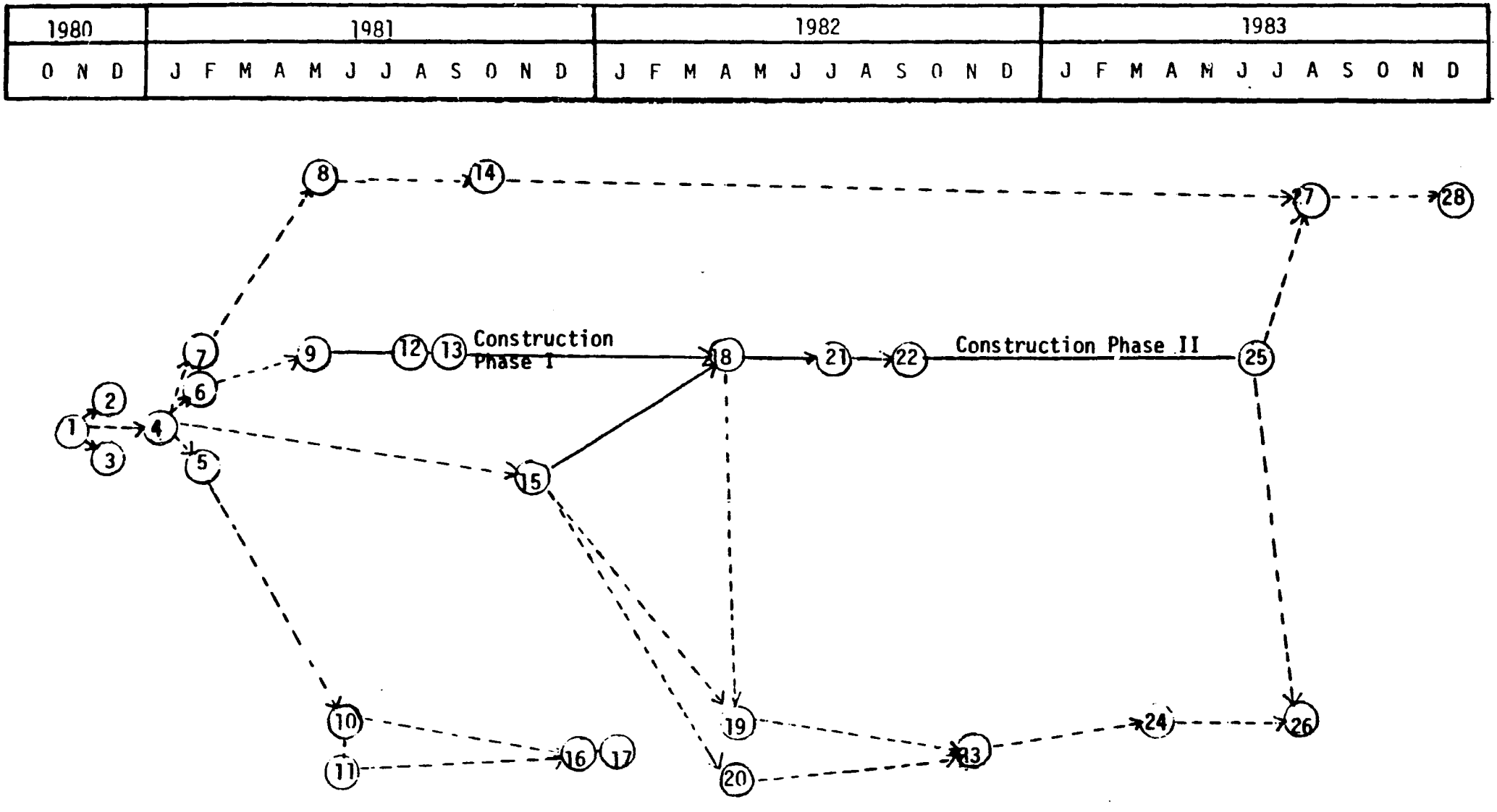
25. Final shelter units completed.

26. Final shelter units occupied.

27. Final HG loan drawdown.

28. First Annual Regular Evaluation performed by RHUDO after completion of project.

PLANNED PERFORMANCE TRACKING NETWORK



Department of State

OUTGOING TELEGRAM

ANNEX 3

PAGE 01 STATE 199310 7299 STATE 199310

ORIGIN AID-46

INFO OCT-01 AF-10 H-02 EB-08 /067 R

DRAFTED BY AFR/EA: R. EHEY:MHC
APPROVED BY AA/AFR: W. H. NORTH
AFR/EA: T. O'KEEFE (DRAFT)
AFR/EA: H. JOHNSON (DRAFT)
AFR/DP: D. WILSON (DRAFT)
AFR/DR: J. NIXON (DRAFT)
AFR/DR: A. TUMMARILLO (DRAFT)
AFR/DR: F. MOORE (DRAFT)
GC/AFR: E. DRAGON (DRAFT)
OS/H: A. NOLAN (DRAFT)
DESIRED DISTRIBUTION
4M ACTION AFR 15 INFO CHRON 2 3 6 7 8 IA IG PPC GC GCAF GCFLD FM HO
PIA DI CA SER RUD SER FHLB 46P
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FM SECSTATE WASHDC
TO AMEMBASSY NAIROBI IMMEDIATE
INFO AMEMBASSY PORT LOUIS PRIORITY

UNCLAS STATE 199310

AIDAC

E.O. 11652: N/A

TAGS:

SUBJECT: MAURITIUS SHELTER PID

1. SUBJECT PID REVIEWED 28 JULY AND APPROVED WITH RESERVATIONS NOTED BELOW. RHUDO HEREBY AUTHORIZED TO PROCEED WITH DEVELOPMENT OF PROJECT PAPER COVERING TA COMPONENT FULLY AND PROVIDING SUFFICIENT JUSTIFICATION AND ANALYSIS FOR THE HG COMPONENT TO ENABLE AID/W TO AUTHORIZE THE LATTER. IT IS UNDERSTOOD THAT SOME ELEMENTS OF HG WILL BE DEVELOPED ON BASIS OF WORK OF TECHNICAL ADVISORS AND, IF NECESSARY, ADDED TO PROJECT PAPER BY AMENDEMENT WHEN DESIGN IS COMPLETED. IF RHUDO DETERMINES SUFFICIENT JUSTIFICATION AND ANALYSIS TO AUTHORIZE HG COMPONENT NOT POSSIBLE UNTIL AFTER TA COMPONENT IS UNDER WAY, AFRICA BUREAU RESERVES OPTION TO GIVE A CONDITIONAL AUTHORIZATION OF THE PROJECT. CONDITIONS OF AUTHORIZATION AND MEANS BY WHICH CONDITIONS WOULD BE SATISFIED WILL BE ELABORATED BY OS/H AND PROVIDE FOR EARLY TERMINATION IF A SATISFACTORY HG COMPONENT CANNOT BE DEVELOPED.

2. RHUDO PRESUMABLY UNDERSTANDS THAT, IN VIEW OF PER CAPITA INCOME LEVEL FOR MAURITIUS, ASSISTANCE REQUIRES UNUSUALLY CLEAR AND CONVINCING STATEMENT OF A HOUSING SHORTAGE JUSTIFYING AID INTERVENTION.

3. INITIAL ENVIRONMENTAL EXAMINATION EMPHATICALLY A REQUIREMENT IN VIEW OF KNOWN POPULATION PRESSURE ON LIMITED AREA. AID/W AGREES THAT IEE AS WELL AS 611(A) AND FEASIBILITY CERTIFICATIONS MUST BE PART OF PROJECT DESIGN PROCESS FOR HG COMPONENT. RHUDO SHOULD INFORM AID/W OF EXPECTED DATE FOR IEE AS SOON AS KNOWN.

4. IT IS UNDERSTOOD THAT THE PROJECT IS TO ASSIST THOSE WITH AN INCOME BELOW 750 RUPEES PER MONTH, AND REDUCE EXPENSES OF SUBSIDY. PROJECT PAPER SHOULD ADDRESS THE SAFEGUARDS WHICH WILL ASSURE THAT THIS TARGET POPULATION RECEIVES THIS HOUSING, AS WELL AS IMPLEMENTATION METHODOLOGY OF CREDIT PLAN.

5. PID DOES NOT ADDRESS QUESTIONS OF SELF-HELP AND APPROPRIATE TECHNOLOGY AS MEANS FOR INCREASING IMPACT OF PROJECT FUNDING. PROJECT PAPER SHOULD CONSIDER THESE ISSUES EVEN IF FINAL DECISION IS THAT THEY ARE INAPPROPRIATE FOR INCLUSION IN THIS PROJECT. PLANS TO INTRODUCE MANUFACTURE OF LOW-COST MATERIALS, PROMOTE GROWTH OF LOCAL CONSTRUCTION FIRMS, AND STIMULATE SELF-HELP MULTIPLIER EFFECT SHOULD BE DESCRIBED.

6. LEGAL PROBLEMS IN CARRYING OUT A PROGRAM HAVE BEEN ANTICIPATED AND WILL BE OR HAVE BEEN RESOLVED AS FOLLOWS:

A. COUNTRY LIMITATIONS: AID/W WILL DETERMINE AT THE TIME ASSISTANCE IS PROVIDED THAT MAURITIUS IS WITHIN THE 40 COUNTRY LIMITATION. IT IS THOUGHT PROBABLE THAT THIS REQUIREMENT CAN BE MET.

B. CIRCULAR 175 AUTHORITY: THE ECONOMIC COOPERATION AGREEMENT OF 6 JULY 1946 BETWEEN THE UNITED KINGDOM AND THE UNITED STATES APPLIES TO MAURITIUS, THUS SATISFYING THE STATUTORY REQUIREMENT AND ALLOWING AID TO ENTER INTO PROJECT AGREEMENTS.

C. SECTION 620(B): AID/GS HAS ALREADY OBTAINED A "DETERMINATION" THAT MAURITIUS QUALIFIED UNDER THIS ECTION."

D. CONGRESSIONAL NOTIFICATIONS: AID/W WILL, AFTER APPROVAL OF THE PROJECT PAPER AND AS A PART OF THE OBLIGATION PROCESS, COMPLETE THE NECESSARY NOTIFICATIONS TO CONGRESS OF AID'S INTENTION TO OBLIGATE FUNDS FOR PURPOSES OF WHICH THE CONGRESS HAD NOT PREVIOUSLY BEEN INFORMED. CHRISTOPHER

MAURITIUS SHELTER PROGRAM: PROJECT PAPER (624-HG-001)

Median Income

The Project Identification Document (PID) for this Housing Guaranty Project stated that the direct beneficiaries of the shelter solutions under the proposed project would be those households earning below median income. The income calculations, however, were based on the 1975 Family Budget Survey of the Central Statistical Office. The exact language of the PID was as follows:

"Direct beneficiaries of the HG component of the project will be those households earning less than the median income (estimated at Rs 750 per month) who will be participants in the shelter programs and will obtain houses and serviced sites." (p. 9)

The August 1978 PID cable reflected this language as follows:

"It is understood that the project is to assist those with an income below Rs 750 per month, and reduce expenses of subsidy. Project Paper should address the safeguards which will assure that this target population receives this housing, as well as implementation methodology of credit plan."

In the spring of 1980 additional analysis was carried out in Mauritius on the available income data. Preliminary studies leading to the proposed IBRD LaTour shelter program indicated that there was a significant under-reporting of incomes in earlier calculations. A Mauritian firm, Messrs Pak Poy and Associates, developed median income data for the IBRD using the new formula and incorporating the latest wage increases mandated by the GOM; the firm concluded that the 1979 median income was Rs 1,200 ($160). AID retained PADCO to perform a similar analysis as part of the project preparation for the Mauritius shelter project. The final PADCO median income figure for 1979 was Rs 1,180 ($157) which figure was increased through government action in June 1980 to Rs 1,300 ($173).

The Project Paper test for direct beneficiaries, therefore, was exactly the same: "Direct beneficiaries of the HG component of the project will be those households earning less than the median income". (p. 12)

Annex 4

MINISTRY OF FINANCE

PORT LOUIS — MAURITIUS

In reply please quote.....CF/G/9/74 II..... *Date* 22nd Feb., 1980

Dear Mr Burke,

USAID Assistance for Housing

In June 1979 the United States Government acting through the Agency for International Development (AID) kindly agreed to place an amount of $230,000 at the disposal of the Government of Mauritius for the construction of two sets of core houses developed by PADCO for demonstration purposes at six sites spread over the country.

The project has now been completed successfully and as agreed upon, a market survey has been carried out. Of the 6000 families interviewed, 93% have shown keen interest in purchasing a core house. Indications are that some 2,500 units could be sold within two years of the start of an appropriate project.

In the light of the outcome of the survey I now write to inform you that it is the declared intention of Government to embark on a wide scale low cost housing project on the lines indicated by PADCO, with the assistance of USAID.

I shall be grateful if you will kindly request the USAID to consider starting negotiation for further assistance under the scheme as early as possible.

Yours sincerely,

(V. Ringadoo)
Minister of Finance

Thomas Burke, Esq.,
Chargé d'Affaires,
Embassy of the United States of America,
Port Louis.

Technical Standards

Technical standards for determination of affordability are shown in Table 1. The standards and unit costs shown in the table have been designed to be affordable by the target group and to reflect the preferences noted in the AID/MHL prototype housing survey.

1. Planning Standards

The basic planning layout uses a simple cul-de-sac layout to achieve the most efficient land use possible. However, the cul-de-sac layout may require modification to meet actual site characteristics as well as requirements for access and future expansion. The following planning standards have been adopted for the project:

Land use and planning standards:

-- average density: 40 units per acre

-- circulation area: 10.5% of site

-- residential area: 89.5% of site

-- access: 10 ft. wide footpaths leading from main roads

-- reserves: 10 ft. wide reserve at front of site

-- plot setbacks: 10 ft. front setback; 10 foot rear seatback

Since the sites are small with a maximum of 25 units per site and will be located near existing public facilities, no provision for community facilities or public open space is required.

2. Infrastructure Standards

All sites have access to public water supplies and electricity so no cost will be incurred for off-site infrastructure. On-site infrastructure which will be charged directly to beneficiaries will consist of water supply and footpaths within the site area. The following standards have been designed for infrastructure.

-- Water supply will consist of 1.5 inch diameter galvanized iron pipes laid in the right-of-way of the footpaths. Individual plot connections will consist of ½ inch diameter galvanized pipes.

-- Footpaths will consist of ordinary tarmac (two coats of bituminous spray) on hardcore filling. Alternatively, if lower costs can be achieved, pre-cast concrete slabs can be used for pavement of footpaths laid on suitable sub-bases.

-- Electricity will be supplied to the site by the Central Electricity Board. Costs will be recovered through user tariffs and are not shown as a project cost.

-- Sanitation for core houses will consist of improved pit latrines connected to water seal toilets. The costs of the pit latrines are included in core house costs. Beneficiaries receiving serviced plots will be expected to construct their own pit latrines or septic tanks according to plans approved by MHL or the Ministry of Health.

-- Solid waste collection will be performed by district councils or municipal governments.

3. Connection Charges

Connection charges for water supply are included in the cost estimates for core housing. Water supply connection charges for serviced plots and individual home construction loans will have to be met by individual beneficiaries either from building loans or their own resources. Connection costs for electricity are paid through monthly user charges.

4. Core House Standards

Two core house types have been designed by AID consultants and MHL technicians. The Type I core house aimed at the 50th percentile of household incomes consists of a semi-detached unit with external measurements of 264 square feet. It contains two bedrooms/living rooms, a kitchen and separate bath and toilet enclosures. The structure has been designed to support one additional floor and can be expanded horizontally through addition of one room.

The Type II core house is aimed at households at the 35th percentile of household incomes. It consists of a semi-detached unit with an external area of 214 square feet. The unit consists of two small bed/sitting rooms, a small cooking area and separate bathing and toilet facilities. The unit can also be expanded horizontally through addition of one room or vertically through addition of one floor. The MHL has agreed to consider this unit for the second phase of the program.

Illustrative plans showing future horizontal expansion and plot layouts are shown in Annex II. However, these plans may have to be altered to suit special site conditions or additional market preferences which may be determined as project design progresses.

5. Serviced Plot Standards

Two types of serviced plots are included in the project. One has an area of 900 square feet (Type I), while the other, aimed at higher income groups, has an area of 1,050 square feet (Type II). Both have been designed to allow households to build detached housing units on individual plots. The minimum setbacks for both plots will be three feet from plot boundaries on both sides of the plot.

No provisions for on-plot connections to water supply or for sanitation have been made to allow individual households maximum flexibility in designing their own housing. The MHL will provide upon request sample building plans showing various house types and standards for water supply connections and construction of improved pit latrines or septic tanks.

6. Construction Standards - Cyclone Resistance

Cyclone resistant structures will be built which include reinforced concrete slabs supported on concrete block walls with vertical reinforcement bars used to tie the block walls together with their concrete footings. This technique replaces the more costly method of building a reinforced concrete frame to support the roof slab and infilling with hollow concrete block. Floor slabs are built on grade over macadam sealed hardcore fill.

7. Participation of Central Housing Authority: Conditions Precedent

Because of the important potential role of the CHA as a developer of low income housing and because of the planned GOM efforts to improve the organization, the CHA might be considered as a potential tenderer for construction work if the following criteria are met to the satisfaction of AID and MHL:

a. The CHA would be required to tender for contracts and no more than 50 percent of the contract could be given to CHA.

b. AID can reject tenders from the CHA (or others) which are 5 percent or more above other tenders.

c. Cost overruns which are not experienced generally by the construction industry must be met by CHA unless there are mitigating circumstances.

d. Penalties for unnecessary delays or cost overruns should be established. Unnecessary delays in construction schedules would result in the termination of the contract and the retendering of the unfinished portions.

e. The CHA must respond to the recommendations of the government auditor, including especially the establishment of an effective cost accounting and management information system which will require hiring a qualified accountant and quantity surveyor and the separate accounting for CHA's social labor costs.

f. Project accounts must be kept separately from other CHA accounts.

g. Overall responsibility, including the monitoring of project costs and schedules, must remain with the MHL.

Technical Analysis of Mauritius Shelter Program

		Core House (Type I)	Core House* (Type II)	Serviced Plot (Type I)	Serviced Plot (Type II)
1.	Percentile income group	50	35	35	50
2.	Monthly income (Rs.)	$160 (Rs. 1,200)	$133 (Rs. 1,000)	$133 (Rs. 1,000)	$160 (Rs. 1,200)
3.	Percent of income for housing (%)	25	25	25	25
4.	Affordable monthly payment (Rs.)	$40 (Rs. 300)	$33 (Rs. 250)	$33 (Rs. 250)	$40 (Rs. 300)
5.	Downpayment (%)	10	10	10	10
6.	Yearly interest (%)	12	12	12	12
7.	Recovery period	25	25	25	25
8.	Total Unit Cost (Rs.)	$4,211 (Rs. 31,588)	$3,516 (Rs. 26,374)	$3,520 (Rs. 26,400)	$4,220 (Rs. 31,650)
9.	Land cost (Rs./300,000 acre)	$933 (Rs. 7,000)	$831 (Rs. 6,234)	$933 (Rs. 7,000)	$1,088 (Rs. 8,161)
10.	On-site infrastructure (Rs.)	$85 (Rs. 639)	$77 (Rs. 580)	$85 (Rs. 639)	99 (Rs. 739)
11.	Site clearance cost (Rs.)	$201 (Rs. 1,509)	$179 (Rs. 1,341)	$201 (Rs. 1,509)	$234 (Rs. 1,756)
12.	Construction cost (Rs./ft^2)	$11 (Rs. 85)	$11 (Rs. 85)	-- --	-- --
13.	Core house size (ft^2)	264	214	--	--
14.	Construction loan (Rs., maximum)	-- --	-- --	$2,300 (Rs. 17,250)	$2,800 (Rs. 21,000)
15.	Density (DU/acre)	43	48	43	37
16.	Plot size (ft^2)	900	800	900	1,050
17.	Type of layout	cul-de-sac	cul-de-sac	cul-de-sac	cul-de-sac
18.	Reserve in front of layout (ft)	10	10	10	10
19.	Width of footpath (ft)	10	10	10	10
20.	Length of block (ft)	216	213	216	210
21.	Plot ratio (length:front)	2.78	3.13	2.78	2.38
22.	Percent of layout circulation	10.41	10.55	10.57	10.32
23.	Plot frontage (ft)	18	16	18	21
24.	Plot depth (ft)	50	50	50	50
25.	Cost of water supply (Rs./ft)	$1.13 (Rs. 8.45)	$1.13 (Rs. 8.45)	$1.13 (Rs. 8.45)	$1.13 (Rs. 8.45)
26.	Cost of footpaths (Rs./ft^2)	$.70 (Rs. 5.25)	$.70 (Rs. 5.25)	$.70 (Rs. 5.25)	$.70 (Rs. 5.25)

*Design to be considered for the second year of the program.

TECHNICAL STANDARDS

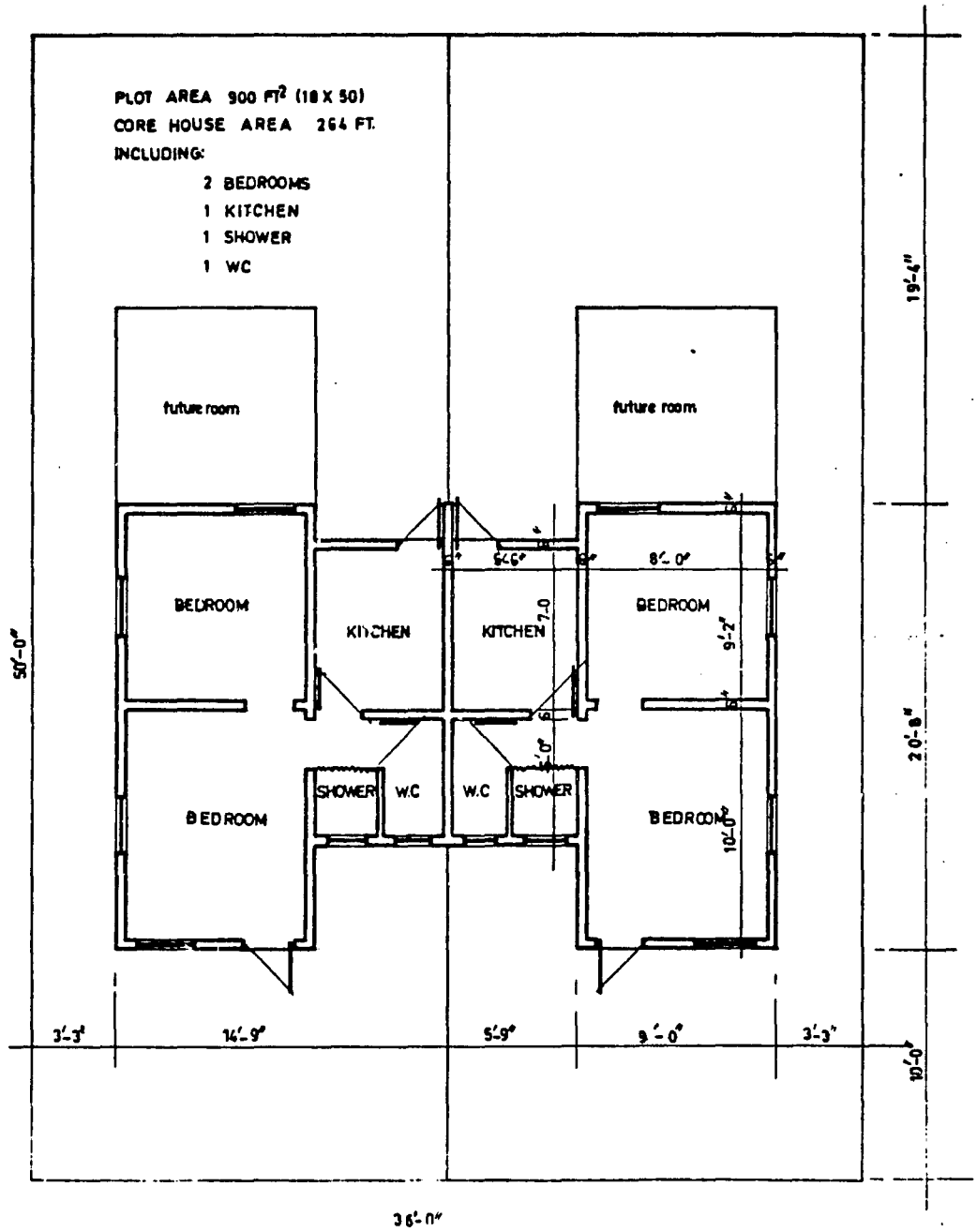
ESTIMATED TOTAL COST OF USAID IMPLEMENTATION UNIT

Two years (1981 - 83)

		Rs
(1)	Project Manager	204,000
(2)	Project Coordinator	144,000
(3)	Engineer-in-Charge (Technical Assistance)[1]	50,000
(4)	Civil Engineer (Technical Assistance)[1]	50,000
(5)	Civil Engineer (Local Counterpart)	144,000
(6)	Quantity Surveyor (Technical Assistance)[1]	50,000
(7)	Architect on Contract	144,000
(8)	8 Building Inspectors	553,000
(9)	Draughtsman	34,500
(10)	Planning Assistant	34, 500
(11)	Clerical Assistant	22,800
(12)	Typist	22,800
(13)	2 Messengers	51,500
(14)	Office Accommodation	72,000
(15)	Office furniture and Equipment	50,000
(16)	Other office costs	72,000
(17)	Travelling Allowances	440,000
		2,139,000

Note (1) Costs are those incurred for rent and other benefits

CORE HOUSE Type I



PURPOSE, PRINCIPAL FINDINGS, AND CONCLUSIONS OF THE PROTOTYPE CORE HOUSING MARKET SURVEY

A. PURPOSE OF THE SURVEY

The Government of Mauritius has recently completed a prototype core housing survey with financial and technical assistance from AID. In late 1979, prototype core houses were built in six locations in Mauritius to demonstrate the core house concept and the principal of core house expansion. Two houde types were constructed in each site together with larger models illustrating how the core houses could be expanded.

In early 1980, a survey was undertaken to determine the marked acceptability of core housing. Previous public assisted housing programs had used much higher standards and large subsidies. Therefore, it was important to assess the public reaction to a new policy of lower standards and economic cost recovery prior to embarking on large core housing projects. The following are the principal findings of the survey.

B. PRINCIPAL FINDINGS OF THE SURVEY

1. Interest in the core housing demonstration project was high, with a total of 7,357 interviews conducted over a two-week survey period.

2. Out of a sample of 2,458 interviewees whose responses were processed by computer, a great majority (89 percent) said they would like to have a core house.

3. Seventy-seven percent of respondents who said they would like like a core house preferred the larger "Type B" (315 sq. ft.) unit.

4. Account was taken of the comments and criticisms made by visitors to the demonstration sites. Among the most common were that:

   -- Most people would prefer two rooms rather than one (in the basic core house) for bed/sitting/dining purposes and would be willing to forego the verandah in order to extend available space.

   -- The units should be reinforced for vertical expension.

5. Seventy-nine percent of those wanting a core house would need to have the land supplied by the government. The rest already own their own plots.

6. Interest in serviced sites was higher than expected: 30 percent of the sample said they would like a serviced site; 24 percent of the sample said they would like a core house but would prefer a serviced plot.

7. Forty-two percent of the individual respondents and 41 percent of the households fell into the probable target income group for core housing projects (Rs. 750-1,250 per month).

8. The median income of individual respondents was Rs. 984 per month. It was Rs. 1,215 per month for households.

9. Ninety-nine percent of those wanting a core house said they would be able and willing to pay for it.

10. Eighty-two percent of the respondents declared having savings. Of these, 99 percent said they would be willing to use their savings for house/plot downpayments.

11. There is also a high demand for shelter solutions in the income group immediately above the target group.

12. A large number of respondents are either renting or living with other households. Only 7 percent of the sample were owner/occupiers of their accommodation; 63 percent were rental tenants and 30 percent were mainly living with parents and other family.

13. About 44 percent pay between Rs. 51-200 per month. The median rent is Rs. 149 per month. Most renting is concentrated in urban areas. Only 17 percent of rental tenants are presently paying Rs. 201-350 per month.

14. Of the total of 2,458 in the sample, 897 or only 36 percent of present dwellings were described as being both "sound" and "on foundation". Thus, 64 percent of dwellings need improvement or replacement.

15. Mauritians strongly prefer dwellings constructed of stone/concrete walls, with concrete slab roofs. However, only 28 percent of the respondents' dwellings were constructed of these materials. The proportion of respondents living in dwellings with iron or tin walls was rather high throughout all income groups, strongly suggesting a real shortage of permanent housing in Mauritius.

16. The average number of habitable rooms per household was 2.5. Eighty-one percent of dwellings with 1-2 habitable rooms were inhabited by families of three or more persons.

17. Just under half (48 percent) of the respondents reported damage to their houses by cyclones in 1979.

18. About 85 percent of respondents were in gainful employment (75 percent employed, 10 percent self-employed).

19. Fifty-one percent of families have only one income earner per household, while 78 percent have 1-2 income earners per household. There is an average of 1.9 income earners per household.

20. The occupations of respondents and their families reflect a largely urban origin and place of employment of the sample. About 50 percent of all household members receiving an income were in the category "Production and Related Workers, Transport and Equipment Workers and Laborers".

21. Household members covered by this survey are predominantly young. Thirty-five percent were under the age of 15 years, 71 percent were under 30 years and 44 percent were under 40 years. The average age of respondents was 34 years (median 35). The average household size was 4.6 persons (median 3.8). The average respondent family consists of two young adults with 0-3 young children and/or one other person.

22. Of all respondent household heads, 16.5 percent were female.

23. Given the problems of the GOM in obtaining land for housing, it was considered important to test the incidence of plot ownership among low income Mauritian families. However, only 14.5 percent were located in the five major urban areas.

24. The majority of respondents (69 percent) were living in the five major urban areas, particularly Port Louis (28 percent). Only 8 percent were residents in the proposed primary and secondary growth poles. The majority (55 percent) were working in the five major urban areas. Of those living in these areas, 68 percent also worked in the same area.

25. About 70 percent of respondents said they would be willing to move in order to obtain a core house. However, of these, 78 percent expressed a preference for one or more of the five major urban areas and only 5 percent said they would be willing to go to the proposed primary and secondary growth poles.

C. PRINCIPAL IMPLICATIONS OF THE SURVEY FOR LOW COST SHELTER PROJECTS

1. The results of the survey indicate that a Housing Guaranty Program to finance core housing and services sites is feasible. There is ample need and effective demand among the potential target group.

2. Because demand is concentrated in urban areas, low income shelter projects should concentrate on the five principal municipalities.

3. Serviced sites should be offered with building loans to those individuals who prefer this option to core houses. Construction loans can also be considered for individuals already owning plots.

4. The core house design should be adjusted to reflect the preferences expressed in the survey. Two small rooms are preferable to one large room. The houses should be sufficiently reinforced to allow for eventual vertical expansion. Houses should be carefully sited on plots to maximize the space available for gardens.

5. The high percentage of employed respondents suggests that the present system of collecting mortgage loans through salary deduction would be feasible for many low income households.

The government should continue to educate the public about the necessity of lower standard housing and more economical cost recovery. As part of this effort, it is important to avoid confusing the public by introducing different standards and terms in the various internationally sponsored housing projects which are presently under consideration.

6. Because the potential beneficiaries include a significant proportion of women-headed households, the legal and social status of women should be taken into account in project design.

ANNEX 7

INITIAL ENVIRONMENTAL EXAMINATION

MAURITIUS LOW-COST SHELTER PROGRAM

OFFICE OF HOUSING

AGENCY FOR INTERNATIONAL DEVELOPMENT

JUNE 1980

I

BACKGROUND

A. ENVIRONMENTAL SETTING

1. Natural Environment

Mauritius is a small, isolated tropical island in the western Indian Ocean. It lies about 800 kilometers (500 miles) east of Madagascar. As a result, it is dominated by maritime conditions. The island is of volcanic orgin, with fertile soils. Elevations reach over 800 meters (2,700 feet) so that the hot lowland climate gets moderated by the higher elevations. Yearly rainfall amounts occur in a wide range, from 900 millimeters (35 inches) on the west coast, to 1,500 millimeters (60 inches) on the west coast, to 1,500 millimeters (60 inches)on the southeast coast, to over 5,000 millimeters (200 inches) in the highland peaks. The well-watered island has high-velocity streams which drain the broad, high upland plateau.

The cyclone is the major negative natural process which affects Mauitius. Cyclonic storms occur during the summer, from January to March. On the average, there is a major storm every fifteen years. The last major cyclone, Gervaise, occured in February 1975. It resulted in nine people dead, 59 injured, and property losses over $200 million. The storms come from he northeast, with gusts up to 280 kilometers per hour (170 miles per hour). Therefore there are both high-impact winds and torrential rains associated with the cyclones.

2. Human Environment

Mauritius is a small island with a big population. According to the draft Project Report (May 1980, page 3), there are about 12,000 persons per square mile. The rural population is about 900 persons per square nile, making Mauritius "one of the highest rural population densities in the world" (Stoddard, et al., page 77). The necessities for skillful land use of scarce natural resources, and for appropriate human settlement planning, are therefore quite significant.

The island is a polyethnic society. Approximately 67 percent are of Indian origin, both Hindu and Muslim. Another 28 percent are Creòles of African and European extraction. Chinese comprise about 5 percent of the population, and French are less than 1 percent of the total.

With such a complex society, special care is needed in meeting sociocultural preferences in dwelling unit design. Any differences in self-help labor techniques and other technical aspects of the program should be specified. Further planning information is contained within the Social Soundness Analysis of the Project Report.

Health concerns include the occurrence of malnutrition and anemia; malaria (now with reduced severity and distribution); and parasitic diseases (schistosomiasis especially, and also hookworm). Care should be exercised to develop housing in areas where health conditions are improved and safe.

3. Infrastructure Services

Potable water is essentially derived from superficial sources. Mauritius is a well-watered island with adequate upland reservoirs, short streams, and several crater lakes. Electricity is generated from hydroelectric resources. Further potential is available. The Central Water Authority and the Central Electricity Board are the responsible providing agencies.

Sewerage systems will consist of relatively small-scale technology options. Because major municipal waterborne collector systems are not prevalent, other techniques are being planned for the HG program. For the core houses, improved pit latrines connected to water seal toilets will be utilized. For the serviced plots, either pit latrines or septic tanks are being considered.

B. PROPOSED HG PROJECT

1. Characterization

As presently constituted, the proposal would benefit 1,400 low-income families located throughout Mauritius. $6 million would be loaned in three separate subprojects, which would assist beneficiaries from the 20th to the 50th percentiles.

a. 500 core houses to be built in two years, split in equal numbers each year, and scattered in small quantities throughout the island.

b. 500 serviced plots, 300 of which would be of 900 square feet, 200 of 1,050 square feet. Construction loans would be provided for each plot, ranging from 14,000 Rs. to 21,000 Rs. Sites would be scattered throughout the island.

c. 400 construction loans, for those who already own plots of land, up to 31,650 Rs.

Technical assistance would consist of a housing implementation specialist (architect or engineer) for 24 months, and short-term technical assistance in housing sector program planning and housing finance.

2. Institutional Participants

As indicated by the Shelter Sector Analysis, Appendix III, there is no overall environmental institution in Mauritius. At the present time, the institutional structure is devised in the following manner:

- Natural resources and agricultural land use:

  - Ministry of Agriculture

- Public health and welfare:

  - Ministry of Health (especially Environmental Health Unit)

- Land-use planning and urban development:

  - Ministry of Housing, Lands, and Town and Country Planning

- Infrastructure services (water, sanitation, solid waste, electricity:

  - Central Water Authority
  - Ministry of Works (rural areas)
  - Municipal councils (urban areas)
  - Central Electricity Board

- Cyclone disaster assistance:

  - Office of the Permanent Secretary of the Prime Minister (Central Cyclone Committee)
  - Meteorological Service of Mauritius (advance warning of cyclones

These different institutions will require coordination in order to ensure that the project is soundly executed.

II

EXAMINATION OF ENVIRONMENTAL IMPACTS

A. GENERAL ISSUES

As far as project planning has proceeded to date, there definitely is a basic understanding of the following issues. All are being addressed in the ongoing refinement of the project. There are some points which should be elaborated upon in greater detail than others, but all three issues remain of fundamental importance.

1. Natural Hazards

   - Cyclonic storms and related phenomena (high winds, heavy rainfall, flooding, slides)
   - Annual precipitation distribution, intensity, and potential for flooding

2. Town Planning and Site Location

   - Urban sprawl potential
   - Microgeographical location concerning impact of the natural environment on project

3. Shelter/Infrastructure Design, Construction, and Operations

   - Dwelling unit types and specifications
   - Special design features for severe environmental impacts, such as the cyclones
   - Provision of potable water and electricity
   - Sanitation and stormwater drainage systems
   - Appropriate technology and design stnadards, indigenous materials, and self-help labor

B. CRITICAL CONCERNS

1. Natural Hazards

The close connection between the shelter sector and the environment is particularly evident in the Mauritius situation. To quote the PID (page 1), "housing activities, particularly those relating to low-income families, have come almost entirely in response to the damage wrought by the cyclones which periodically sweep the island." These cyclones typically occur during the first months of the

year. There is no place on the entire island that can fully avoid the fury of the cyclones. Of crucial importance, then, are the various efforts to minimize impacts. These technical efforts will be discussed in the subsequent sections. The concerns are to meet the impacts of high winds, torrential rainfall, and the associated flooding and landslides.

The institutional framework to deal with the hazard is as follows. Approaching cyclones are spotted and monitored by the Meterological Service of Mauritius, which issues warnings upon impending cyclone approach. The Central Cyclone Committee (Office of the Permanent Secretary of the Prime Minister) is responsible for cyclone preparedness and damage prevention planning for the country. As of yet, the Ministry of Housing, Lands, and Town and Country Planning is not a member of this committee. Therefore, it is recommended that the Ministry of Housing establish working ties with, and preferably representation on, the Central Cyclone Committee.

The Meteorological Service is available for technical assistance concerning appropriate design and development of specific sites. They should be consulted prior to each site selection. In this manner, those sites with particularly intensive wind loading conditions and/or severe flooding which cannot be mitigated by economical means can therefore be deleted from HG consideration.

Furthermore, there are important concerns associated with the noncyclone annual dynamics of the Mauritian meteorological cycle. Each year an average of over 5,000 millimeters (200 inches) falls on the highest ranges. On the upland plateau itself, the town of Vacoas receives over 2,000 millimeters (80 inches) per year. Such heavy rainfalls naturally imply extensive stormwater drainage systems to handle the impact.

2. Town Planning and Site Location

The shelter program needs to be developed in the context of mazimum efficiency of urban land use. Sound socioeconomic planning is required because all Mauritian shelter is placed within the context of existing high population pressure on the land. Sound physical planning is required because the Mauritian environment is dominated by cyclonic storms.

In socioeconomic terms, there always is potential for generating urban growth into entirely new regions from any new shelter program. That potential should not be realized under AID auspices. Rather, the stated AID objective of urban infill should be pursued totally. In this manner, prime agricultural land would be preserved. Existing communities would be improved by the presentation of the new option of moving into sound shelter nearby that is being offered by AID.

In physical terms, the leeward side rather than the windward side is the preferred location for housing construction. Existing urbanization choices support this environmental recommendation. The capital of Port Louis and most of the other towns are partially protected from the impact of the cyclones by the central highlands. Sites that are in particularly sheltered spots, by means of local topographic features, would be more favorable than sites without any topgraphic obstruction to the passage of cyclones. At the same time, special site design features such as windbreaks made out of casuarina trees are worthy of consideration.

Analysis (RHUDO files) of the site selection process for the prototype shelter program indicated that three out of six sites were inappropriate for the intended shelter use. The following problems were identified at the three worst sites: exposed bedrock and poor transportation access; rocky and hilly terrain with poor drainages; and high groundwater table with continual flooding from rains. With such recent experience as demonstrated by the prototype program, there is greater urgency to utilizing a sound site selection process.

3. Shelter/Infrastructure Development

The proposed units are referred to in the Project Report as "cyclone-resistant" structures. That is the key to the design of HG components, both shelter and infrastructure. It is necessary to specify in detail the problems which are caused by the cyclones, and then to offer solutions. Requisite, therefore, are appropriate building materials with the necessary structural strength. For infrastructure, consideration should be given to placing electric lines underground from the street line to the individual house connection so that storm damage would be minimized to the extent possible. In this situation, community labor could be a means of lowering installation costs, and of increasing community participation in the program. Detailed analysis and responses to the cyclone hazard will be more possible during the PP and subsequent detailed design phases.

As is usually the case with similar projects, the Mauritian ability to provide the infrastructure services will be a determining factor in project feasibility and development. It already has been stated in HG project reports to date that sites will be developed only when municipal water and electric supplies are available. Water quality needs to be monitored besides water availability.

The basic requirements for safe, effective sewerage and stormwater drainage are heightened by the Mauritian circumstances. There is a lack of municipal sewerage systems, so that more care is required in on-lot collection by alternative means, such as improved pit latrines. Either on-lot or off-lot treatment and disposal of the wastes shall necessitate soil tests and adequate system maintenance. Because of the heavy annual rainfall and the recurring cyclonic storms, sotrmwater drainage is highly significant. The need will be to ensure expeditious, off-site transportation of the stormwater, with provision for minimizing negative impacts downstream.

III

RECOMMENDATIONS

A. THRESHOLD

Based upon the foregoing information, a Positive Threshold Determination is recommended. As defined in AID Regulation 16 and DS/H Manual Order 42-0, significant impacts of the proposed activity are possible. The bases for the Positive Determination in this case arise from:

1. The certainty of devastating cyclonic sotrms.

2. The necessity for ensuring sound site selection and design criteria in order to minimize or eliminate the negative impacts associated with natural and human environmental factors.

B. SCOPE OF WORK FOR FURTHER ENVIRONMENTAL PLANNING

Field work should be performed during the preparation of the Project Paper, resulting in an environmental check-list with appropriate design measures in order to meet the critical issues identified in the IEE.

APPENDIX A

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*Available in Washington, D.C.

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

ANNEX 8

ASSISTANT
ADMINISTRATOR

GUARANTY AUTHORIZATION

PROJECT 642-HG-001

Provided From: Housing Guaranty Authority

For : The Government of Mauritius

Pursuant to the authority vested in the Assistant Administrator, Bureau for Africa by the Foreign Assistance Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance of guaranties pursuant to Section 222 of the FAA of not to exceed six million dollars ($6,000,000) in face amount, assuring against losses (of not to exceed one hundred percent (100%) of loan investment and interest) with respect to loans by eligible U.S. investors (Investor) acceptable to A.I.D. made to finance housing projects in Mauritius.

This guaranty shall be subject to the following terms and conditions:

1. Term of Guaranty: The loans shall extend for a period of up to thirty years (30) from the date of disbursement and may include a grace period of up to ten years on repayment of principal. The guaranty of the loans shall extend for a period beginning with the first disbursement 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 Mauritius Guaranty: The Government of Mauritius shall provide for a full faith and credit guaranty to indemnify A.I.D. agains all losses arising by virtue of A.I.D.'s guaranty 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 guaranty shall be subject to such other terms and conditions as A.I.D. may deem necessary.

Goler T. Butcher
Assistant Administrator
Bureau for Africa

Date

Clearances:

THE HOUSING GUARANTY PROGRAM

STATUTORY CHECKLIST

THE GOVERNMENT OF MAURITIUS

HOUSING GUARANTY PROJECT 642-HG-001

	ANSWER YES OR NO PUT PP PAGE REFERENCES AND/OR EXPLANATIONS WHERE APPROPRIATE
A. General Criteria Under HG Statutory Authority.	
Section 221(a) Will the proposed project further one or more of the following policy goals?	YES
(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;	YES
(2) is intended .o assist in marshalling resources for low-cost housing;	YES
(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/or;	YES
(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 low-cost shelter programs and policies?	YES
Section 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 $1,555,000.000?	YES
Will the guaranty be issued prior to September 30, 1982?	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	YES

(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 institution 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 conservation 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

Section 223(h)
Will the Guaranty Agreement provide that no payment may be made under any guaranty issued for any loss arising out of fraud or misrepresentation for which the party seeking payment is responsible? — YES

Section 223(j)

(1) Will the proposed Housing Guaranty be coordinated with and complementary to other development assistance in the host country being furnished under Chapter 1 of part 1 of the Act? — 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 90 percent of the face value of the proposed guaranty will be for housing suitable for families below the median income. or below the median urban income for housing in urban areas. in the host country? YES

(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

(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

Section 238(c)

Will the guaranty agreement provide that it 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

B. Criteria Under General Foreign Assistance Act Authority.

Section 620/620A

(1) 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

(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