R E P O R T

on

HOUSING ISSUES IN BURUNDI

Prepared for:

Office of Housing and Urban Programs

Agency for International Development

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INTRODUCTION

The Office of Housing and Urban Programs (PRE/H) and the RHUDO for East and South Africa requested the assistance of the National Council of Savings Institutions (NCSI) in reviewing a number of problemmatic issues which have emerged in the preliminary stages of considering a HG loan for Burundi. Daniel S. Coleman and Timothy J. Smith were assigned to carry out this task and travelled to Burundi for two weeks in November, 1983, in preparation of the following report.

The team was asked to review and provide analysis of the following specific issues:

1. Analysis of the Société Immobilière Publique (the National Housing Authority for Burundi), including a review of its programs, activities and overall capabilities.

2. Income distribution and housing needs, including an analysis of current median income and projections for effective market demand for housing by below median income families.

3. General Economic Considerations.

4. Technical assistance needs of the Societe Immobiliere Publique, with reference to its possible implementation of a HG program.

Each of these issues is discussed separately in the following report. Prior to this work, the Office of Housing and the RHUDO carried out the following studies on housing in Burundi:

Shelter Sector Assessment, National Savings and Loan League, August, 1983 (Janet Kerley and Carol Oman, consultants)

Analysis of SIP, National Savings and Loan League, February, 1983 (Edward Robbins and Frank Connor, consultants)

On this mission, the NCSI team was joined by Ernest A. Slingsby, an economist for the Planning and Development Collaborative International, Washington, D.C. Mr. Slingsby has examined issues concerning affordability, land and construction costs, and the potential for a HG program in Burundi's secondary cities. Mr. Slingsby's report will be forwarded separately to the Office of Housing and Urban Programs.

Issue I: Analysis of the Société Immobilière Publique

The Société Immobilière Publique (SIP) is a parastatal institution operating semi-autonomously under the auspices of the Ministere de Travaux Publics, de l'Energie et des Mines (MTPEM - Ministry of Public Works, Energy and Mines).

Created in May 1979, SIP is the only formally-structured governmental agency concerned with housing production and development, and in fact is the only housing developer - private or public - in the country. Recently, the National Congress affirmed SIP's role as the sole institution in Burundi responsible for housing, and accordingly, SIP is the most appropriate national institution through which U.S. AID should consider implementing a HG program.

In reviewing and analyzing SIP's capacity to carry out a HG program, a number of operational and policy issues emerge. These issues broadly cover SIP's past performance, operations and management as follows:

1. Target groups by income and type of housing solutions under SIP's current programs.

2. Cost recovery and subsidies.

3. Fiscal management.

4. General management.

5. Overall programmatic approach to housing delivery.

Each of these issues is discussed separately below. Most of these concerns have been addressed to some degree in the Shelter Sector Assessment for Burundi, prepared in mid-1983 by Kerley and Oman, and in the analysis of SIP prepared in February 1983 by Robbins and Connor. This discussion will update these earlier studies to the extent that new information is available, and will place these issues in the specific context of a HG program.

1. <u>Target Groups and Housing Solutions</u>

SIP's broad mandate is to develop housing throughout Burundi, with priority to be given to meeting the needs of families with modest incomes. An implied objective of SIP as the national housing authority is to improve housing conditions of lower income families. To date, 'modest income' has never been defined, nor has a specific policy been stated or effective demand identified for affordable housing for low income households.

SIP does not construct housing itself, but contracts out its construction activities to the private sector. It operates similar to U.S. residential property developers, and to a lesser extent as a property manager, but it does not become involved in property or land acquisition. At present, SIP's main activity is the management of a Lease/Purchase program through which the government provides housing assistance to civil servants (including employees of government agencies and parastatals). SIP also manages an Individual Loan program through which the government subsidizes the construction of units by civil servants who want to build their own homes. Under this latter program, individuals arrange for private construction financing, and SIP arranges for and manages the government subsidy. Within the financial system, SIP serves as a pass-through for construction funds, and does not operate as a housing bank <u>per se</u>.

Despite its mandate to assist a broad range of income groups, in practice, SIP has acted almost exclusively as a property developer serving only upper-income civil servants through heavily-subsidized programs. Many middle and lower income civil servants, or an estimated 50 percent of civil servants, can not afford SIP-developed housing, even with substantial subsidies. Only 6 percent of the country's population receives income from the modern or formal sector, with government being the largest employer, and thus it becomes apparent that SIP is addressing the needs of only a small segment of all households (probably no more than 2 percent of the population).

At present, only civil servants participate in SIP's programs, which further constrains its ability to serve lower income households. This limitation on participation, coupled with the long-time policy to subsidize housing, reflects government's policy to give priority to housing for government employees. Furthermore, civil servants have come to expect the government to provide them with housing, generally of European style and high standards. This attitude may derive partly from the historical precedent set by colonial administrations which provided their civil servants with housing; nevertheless, as will be demonstrated later, it is costly for the present government to continue such programs, and in fact it may be considered an inappropriate use of the government's limited resources.

The upper income bias of SIP's housing activities is reflected in the type of shelter solutions it develops. A typical SIP-developed house or apartment is 3-bedroom, 1-bath, with living room and kitchen, and fully serviced by water and electricity. The smallest units are about 65m2, and in general, their design and finishwork reflect European influence. According to the SSA, nearly 90 percent of the construction materials used by the formal sector are imported, and this would apply to SIP projects. As a result, SIP housing is expensive. The construction costs of units recently completed by SIP ranged from FBU 1.8 million* to FBU 2.1 million, or US$20,000 to US$23,300 - not including land acquisition, infrastructure or overhead. In Gitega, where SIP is building 130 units, construction costs range from about US$20,000 to US$70,000, which is affordable to a very small segment of the population.

In comparison, the World Bank's DUB project in Bujumbura is building units for upward to US$4,000, which the World Bank estimates is affordable to households with incomes at about the 65th percentile. The DUB Project's lower construction costs can largely be attributed to the maximum use of indigenous materials, which represent about 80 percent of all materials, as well as lower design standards. For about US$2,500, a family can hire a contractor to build a 48m2 3-room semi-permanent house with a stone foundation, cement floor, adobe or brick walls with cement grout finish, corrugated sheet metal roof and pit latrine.

Construction costs for the DUB project are approximately FBU 4,600/m2 compared to over FBU 27,000/m2 for SIP homes, and still lower construction costs could be attained through self-help efforts. Although the DUB Project homes offer fewer amenities than SIP homes, they are clearly more affordable to lower income families, and reflect the ability-to-pay concept being adopted by many developing countries as the most appropriate method of maximizing the delivery of housing.

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*1 US$ = 90 FBu (Burundian Francs

The import component of SIP housing substantially increases construction costs. The materials themselves are expensive, and damaged or stolen goods, late delivery and insurance problems result in disorganized building activities, high operating costs and project delays - all factors which increase construction costs. SIP is aware of these problems, and has indicated its intent to increasingly utilize indigenous materials, such as locally-produced brick instead of concrete block made from imported cement. However, SIP has not established any guidelines on maximizing the use of local materials.

SIP is aware that its current programs are serving only upper income civil servants, and it has expressed a willingness to produce less expensive housing to serve lower income civil servants. However, SIP's administrative policies have not been changed to extend participation to non-civil servants, nor has it developed plans which significantly reduce design standards, thereby reaching lower income families. SIP recently undertook its first site development project, but this is essentially a subdivision for foreign advisors, Burundian military officers and upper income individuals, including civil servants, who want to purchase a lot to build their own homes.

The above discussion of the beneficiaries and housing solutions under SIP's current programs raises four areas of concern which will need to be addressed in designing a HG program:

First, limiting participation for SIP's programs to only civil servants limits the housing market in general and the number of potential beneficiaires below median income in particular. Opening up eligibility to non-civil servants will expand the housing market for a HG program.

Second, SIP has never defined 'moderate' or 'low' income. An acceptable definition of low income, or more appropriately median income, will need to be established, including procedures for determining income received outside of the formal sector.

Third, SIP will need to design housing solutions which are affordable to below median income households. This will require a significant scaling back in present design standards and maximizing the utilization of local materials.

Fourth, SIP has indicated a willingness to consider assisting lower income families, but to date, genuine efforts in this direction have not been made, as exemplified by the lack of low income project proposals and the absence of an articulated low income shelter policy. SIP will need to develop such a policy, clearly committing itself to producing low cost shelter solutions.

2. <u>Cost Recovery and Subsidies</u>

SIP operates two housing programs, Credit Individuel (Individual Loans) and Location/Vente (Lease/Purchase). Both programs are heavily subsidized, and participation is limited to civil servants. Under the Individual Loan program, individuals who want to build their own homes secure a loan commitment from a bank, in most cases a government-owned finance institution such as the Caisse d'Epargne du Burundi, and in turn they come to SIP to arrange for the government subsidy. Under the Lease/Purchase program, civil servants are able to purchase existing houses or SIP-developed units which are owned by the government. Previously, this housing was rented to civil servants at no charge to the employee; now, civil servants can buy these units under a 15-year lease. (At the time that the government changed its policy from 'renting' housing to civil servants to the Lease/Purchase program, all government salaries were increased by 25 percent to offset monthly lease payments.)

The principal difference between the Individual Loans and Lease/Purchase programs is that under the latter, SIP holds title to the property, while under the former individuals have title to the property since they have arranged for the financing. The underlying principle is the same, however, which is that civil servants and government share the cost of housing construction and purchase. Under the Lease/Purchase arrangement, SIP manages about 1,200 contracts; at present, only about 150 Individual Loans have been approved. The greater number of lease contracts reflects the fact that the program has been applied to units built over many years. SIP-developed housing also comes under the Lease/Purchase program, and SIP has constructed an average of 167 units per year between 1979 and 1983.

Under both programs, the amount of government subsidy is similarly calculated. The major per unit subsidized costs are as follows:

1. SIP pays a 20 percent downpayment on the construction loan, which later becomes the downpayment on the permanent mortgage.

2. SIP pays all interest on construction financing, currently at 10.8 percent per annum. The construction period is typically six months.

3. The principal amount of the loan is amortized over 15 years in most cases, and the current interest rate is 10.8 percent. (The rate was 8.5 percent prior to 1982.) SIP pays all interest on the loan for the entire amortization period, and the beneficiary repays principal only.

4. SIP covers the cost of all land acquisition, land development and overhead. Land is commonly provided at a nominal cost or free from the government; nevertheless, a market value can be attached to the land which represents a form of hidden subsidy, as do most administrative costs. Infrastructure development (water, electricity and septic tanks) can be as high as 50 percent of construction costs, but is generally around 25 percent.

SIP offsets these subsidies by collecting a 6.5 percent fee, based only on construction costs and not total project costs. The principal amount of the loan is also eventually recovered.

As the above suggests, the level of subsidy per unit can be quite substantial. Moreover, the fact that SIP pays interest over the 15-year term of the loan locks the government into a long-term commitment of resources each time SIP undertakes a housing project or approves an individual loan.

An understanding of the real cost of these subsidies to the government is best achieved by looking at a recent SIP-developed project. At Ngagara VI, one of the smallest housing units of 65m2 was built for just over FBU 1.8 million on a 450m2 lot. To calculate total costs for this unit, the following assumptions are made:

1. The cost of construction is increased by 6.5 percent to reflect the fee paid to SIP which is rolled back into the principal amount, bringing the total loan (construction costs) to FBU 1,917,000.

2. The 20 percent downpayment is based on FBU 1,917,000, for a downpayment of FBU 383,400.

3. Construction-period interest is based on a total drawdown of FBU 1,533,600, over a four-month period at 10.8 percent interest. This assumes a construction period of six months, with the 20 percent downpayment covering construction costs for the first two months.

4. The market value of the land is based on FBU 400/m2, which SIP reports as the sales price of undeveloped land for in Bujumbura. This is the opportunity cost of this item, and not an out-of-pocket expense.

5. Infrastructure development is 25 percent of FBU 1.8 million, or FBU 450,000.

6. Overhead expenses are based on the approximate ratio of 1 production-staff employee for every four houses built between 1979 and 1983. The salary is estimated at FBU 192,000 annually (approximate median income), of which 25 percent is FBU 48,000. Another 25 percent of this amount is added to account for fringe benefits, rent, supplies, etc., for a total of FBU 60,000 - which is considered to be conservative.

Based on the above assumptions, the total cost of this unit at Ngagara VI is calculated to be FBU 4,210,879 (or US$46,780), as follows:

FBU 1,917,000	Construction Cost
34,506	Interest on interim financing
1,569,373	Interest over life of loan @ 10.8% over 15 years
180,000	Land value
450,000	Infrastructure development costs
60,000	Overhead
FBU 4,210,879	Total Unit Cost

The amount of total unit cost which SIP and the Government of Burundi covers is calculated to be FBU 2,677,279, as follows:

FBU 383,400	Downpayment
34,506	Interest on interim financing
1,569,373	Interest over life of loan
180,000	Land Value
450,000	Infrastructure development costs
60,000	Overhead
FBU 2,677,279	Total paid by GRB and SIP

This amount paid by SIP and the Government of Burundi represents a total outflow equivalent to 63.6 percent of the total unit cost, and is offset by only FBU 117,000, the 6.5 percent fee SIP collects. This brings SIP's outlay to FBU 2,560,279, or equivalent to 60.8 percent of total unit cost. This represents the total amount of subsidy for this one unit, which can be calculated somewhat differently as follows:

FBU	4,210,879	Total unit cost
Less	117,000	6.5% fee
Less	1,533,600	Principal repayment
FBU	2,560,279	Total Non-recovered Costs

The non-recovered expenses represent 60.8 percent of total unit cost. By any standard, this is a very high subsidy. Also, it should be remembered that this subsidy has been calculated for one of the smallest units and lots at Ngagara VI. Many of the SIP-developed houses have been much more costly; for instance, at Mutanga, one of SIP's largest projects, per unit construction costs were approximately FBU 3.3 million. Assuming for the moment that the same subsidy amounts calculated for the Ngagara VI unit can be applied to all units under SIP's programs (150 individual loans and 1,200 lease/purchase contracts), the cost of providing housing to these civil servants is staggering: Over FBU 3.358 billion or nearly US$37.4 million. This is a very rough estimation of the government's subsidy commitments to date, but it is indicative of the high cost of the government's present housing policies, and each new unit simply adds to it.

The attitude and policy that the government should continue to provide these deep subsidies seems firmly entrenched. Proposals put forth by SIP for consideration under the HG program, albeit in the early planning stages, incorporate the same subsidies identified above. Only in recent days has the National Congress passed the first municipal tax in order to recover some costs of infrastructure development, but it is not anticipated that this will result in recovery of shelter development costs to any appreciable extent.

The Burundi government's policy of subsidizing housing and the policy of full cost recovery generally pursued under the HG program appear to be at odds. This conflict may prove to be the single most difficult issue to resolve in negotiating a HG loan package. Careful consideration must also be given to the implications of a cost recovery policy implemented under a HG project, concurrent with the SIP's continuing to provide subsidies to other market sectors - namely, higher income civil servants. The net result would be that families below median income (HG's target group) would be paying a substantially larger share of their incomes and paying a greater percentage of housing costs than the higher income beneficiaires under SIP's other programs. The World Bank and United Nations have minimized the potential for this conflict by implementing their projects with teams or units outside of SIP, but a HG project carried out by SIP would create a situation whereby SIP is administering programs with very different cost recovery policies. The overall long-term costs to the government of such substantial housing subsidies must also be considered, particularly when the country is hard-pressed for financial resources. The whole subsidy issue must be carefully reviewed and resolved.

3. Fiscal Management

The analysis of SIP's operations by Robbins and Connor dealt in detail with the institution's financial system, identifying areas of strengths and weaknesses, and suggesting areas for technical assistance. The NCSI/PADCO team has not had the opportunity to review in as great a detail these same considerations, but no major changes in SIP's financial management were identified. Thus, the following discussion largely summarizes the findings of Robbins and Connor.

From the outset, it should be stated that SIP has problems in its financial management. The current accounting system does not provide the type of integrated information which would enable management to maintain financial control over its operations and develop a coherent approach to achieving program goals. Also, the lack of commitment to full cost recovery had resulted in the failure to adequately account for each program's cost to the government, making it nearly impossible to ascertain the cost effectiveness of each program. To SIP's credit, it is aware of these shortcomings, largely due to the work of Robbins and Connor, and it recognizes the need for professional technical assistance to improve its system.

Three particularly problemmatic areas related to SIP's financial administration are:

1. Since its establishment in 1979, SIP's accounting system has developed on an ad hoc basis. Management has endeavored to develop the accounting system on the basis of the National Accounting Plan of Burundi which is based on the French uniform accounting system, but it has not provided information in an acceptable form for financial control.

2. Relevant financial statements, such as balance sheets and operating statements, are prepared only once a year, hindering SIP's ability to review on a regular basis its overall operating performance and liquidity position. Some monthly reports are prepared, such as recapitulation of commitments, billings and cash receipts, but they are not compared to projections and they are in themselves not considered sufficient for good financial management on an integrated basis.

3. The government has been slow in disbursing funds to SIP to be used to make interest payments to banks providing mortgage loans to recipients of SIP housing. At present, SIP is in arrears to these financial institutions for approximately FBU 196 million, plus penalty fees which SIP must meet from its own resources. This problem is not one over which SIP has direct control, but better projections of each program's cash flow needs might enable SIP to coordinate its commitments with anticipated receipt of government funds, thereby easing liquidity problems.

Robbins and Connor has identified SIP's financial management as an area requiring up-front technical assistance, prior to any firm commitment or disbursement of HG funds. The purpose of this technical assistance would be to develop a financial system which would:

- provide an integrated system of financial and internal controls;
- provide full disclosure of information on resources, assets, liabilities, operating costs and status of funds;
- permit effective control over income, expenditures, properties and other assets;
- furnish necessary cost data and financial information for the formulation and implementation of programs;
- provide clear guidance on accounting practices and procedures to be employed;
- serve as the basis for staff supervision and skills training;
- comply with all reporting responsibilities to the national government.

These are elements in any sound financial management system, but they are generally lacking in SIP's current operations. The fact that certain reports are prepared on a monthly basis indicates SIP's willingness to achieve financial control, but in a country where there are no public accounting firms, it is unrealistic to expect SIP to develop a financial system without professional assistance which is adequate to maintain fiscal control and facilitate financial planning.

4. General Management

The overall problems with regard to SIP's financial management have already been discussed. These concerns reflect upon SIP's general ability to manage and carry out its programs, and thus they need to be addressed in the process of formulating a HG project. Other management concerns are not as easily specified, since an assessment of general management capability is often qualitative in nature. The principal management issue for HG consideration will be SIP's ability to conceptualize, develop and implement a shelter program relevant to a low income constituency.

SIP apparently operates without a specific development plan which incorporates objectifiable targets and long-term strategies. Annually, SIP submits a budget request to the National Congress for a variety of projects, but these do not appear to be given any order of priority nor is a plan formulated for their phased implementation, except in the cases where foreign donors have already committed a portion of the financing. SIP undertakes whatever projects are possible based on its budget authorization. Since its establishment, SIP has not been producing much housing; only an average of 167 units per year. In part, this is the result of delays in receiving funds from the government as well as budget cutbacks. Based on its actual level of production, however, SIP appears to be overstaffed, with about 117 employees compared to 167 units. Naturally, some staff is involved in property management and not production, but still this level of staffing tends to suggest either low productivity or inefficient use of staff resources. All of these factors combined indicate the need for SIP to formulate a development plan and strategy, including quantifiable objectives and identification target groups, and to reassess its staffing needs to carry out this plan.

SIP is able to finance its administrative and operational expenses from a fee of 6.5 percent added to the construction costs of its projects as well as rental income from an upper income housing project. Therefore, SIP does not depend on government budgetary assistance to meet its daily adminstrative and operational expenses.

SIP's Acting Director is a university graduate who is dedicated to carrying out housing programs, and he is prepared to consider shelter solutions for lower income families than SIP presently serves. SIP's technical department is staffed by persons with appropriate skills and training, including engineers, architects and draftsmen, but it is inexperienced in planning and designing minimum-standard or low cost housing projects. The only low cost projects which have been undertaken in Bujumbura are those of the World Bank and United Nations, but SIP's staff has not benefitted very much from these experiences. With technical assistance and staff training, it is thought that SIP can adjust its design approach to encompass lower cost solutions, and that the present management will be able to improve, redirect and effectively carry out SIP's operations.

5. Overall Approach to Housing Delivery

SIP's overall approach to housing development is on a project-by-project basis, and not through a programmatic approach which would imply a long-term strategy enabling it to deliver housing on an on-going basis. Annually, SIP must seek budget appropriations to cover the development costs of its projects, which means that its capacity to develop housing is entirely dependent on the state of the national economy. Also, the fact that each SIP-developed project increases the level of required budgetary support to cover long-term interest subsidies further limits the availability of resources for new housing projects. The major shortcoming of this approach of SIP's inability to become a self-sustaining operation whereby recovered costs are revolved back into shelter activities.

In this regard, SIP has not attempted to utilize the resources of the private financial sector, but has arranged for most of its construction financing through government-owned and -controlled banks. Naturally, the absence of a full cost recovery policy is an impediment to utilizing the private sector, especially the practice of subsidizing interest rates throughout the term of a loan which private banks would need to feel absolutely confident that the government would have the capability and commitment to pay before they would enter into a financing arrangement with SIP. The substantial unmet obligations the government has already accrued has not fostered confidence in its ability to meet any future obligations. Government-owned banks may be in a position to absorb losses or wait for overdue mortgage payments since presumably there is always the possibility of a last-minute bail out to keep them solvent, but private banks have current obligations to depositors which make it impossible for them to accept such risks. Until such time that SIP amends its policies to enable it to gain access to private sector resources and develop housing through normal finance mechanisms, it will continue to operate on a project-by-project basis without establishing an institutional framework for a long-term housing delivery system.

Issue II: Income Data on Proposed Projected Beneficiaries

The Office of Housing and Urban Programs raised the question as to whether there was any additional or more accurate information on incomes of the proposed project beneficiaries, both in Bujumbura and in the secondary cities. Income distribution figures in the SSA had been based on information contained in the 1979 Urbaplan Study, which was prepared for the World Bank-financed Urban Development Project in Bujumbura. In turn, Urbaplan, a Swiss consulting company, had based their findings on a socio-economic survey carried out by the University of Bujumbura's Economics and Administration Faculty in 1978. The SSA updated the Urbaplan income distribution figures to reflect increases in incomes over the four year period leading up to mid-1983, the date of the SSA.

Original survey information on which income distribution figures can be calculated are found in the following documents:

- The 1979 National Census, Volume I, Final Results at the National Level, August 1982. (Other Volumes are to be published in the future.)

- Bujumbura Socio-Economic Survey, 1978, University of Bujumbura. (Generally referred to as the Dayer Survey, after the Professor who directed the survey.)

- Household Survey of Bujumbura 1978-1979, National Office of Studies and Statistics, Bujumbura, October, 1981 (referred to as the SNES Survey).

Documentation on incomes in all other studies and reports are based on one or a combination of the above surveys. No other baseline data on incomes exists. Moreover, information on incomes is available only for Bujumbura; nothing comparable exists on incomes in secondary cities.

Income distribution information is necessary to determine affordability; therefore it was considered useful to try to determine both the need and effective demand for a possible HG program in Burundi, based on the program's expected terms and given criteria. The following paragraphs are an attempt to determine effective demand, as would be required in the development of a more detailed PID or a Project Paper.

1. Population Estimates

Estimates of the current population of Bujumbura vary widely. Good information generally became available only in the late 1970's, when the surveys mentioned above as well as the first National Census since Independence were carried out. The Dayer Survey reported the population of Bujumbura at 136,220 as of the spring of 1978, while the SNES Survey more than a year later counted 141,040 persons based on the results of the SNES Survey itself as well as preliminary figures from the National Census. Later, when the final Census report was published (Volume I), the population was reported at 163,300 effective August, 1979.

Since then, different estimates have been offered as to the rate of population growth. Urbaplan estimated that the population would grow by 4.7% per annum over the period of 1978-82 based on their estimate of the growth rate in 1979. Afterwards, they assumed that population would increase at a 5% annual rate, at least to 1987. The Government of the Burundi (GRB) in one of its key planning documents estimated that population growth over the 1983-87 period would attain a rate of slightly less than 5%, or 6%, or 8%, all estimates from the same document. The SSA estimated the growth rate over the same period at 7%, but cautioned that that was a steep increase from 4.7% rate estimated by Urbaplan for 1979, and even so, may be less than the 9% suggested by an unidentified source. Given the lack of significant increases in employment opportunities in Bujumbura, coupled with an adequate food supply and a peaceful environment in the rural areas, it is probable that the annual growth rate in Bujumbura will remain in the 5% range.

The estimate of Bujumbura's population as of the end of 1983, as used in this report, is 180,000 inhabitants, with growth to continue by an estimated 5% over the next four years. The following gives the estimates of Bujumbura's population over that period:

1983 - - - - - - - - - -	180,000 persons
1984 - - - - - - - - - -	189,000 persons
1985 - - - - - - - - - -	198,500 persons
1986 - - - - - - - - - -	208,500 persons
1987 - - - - - - - - - -	219,000 persons

It should be pointed out that the provisional Five Year Plan for 1983-87 estimated the 1982 population at 207,000 persons with increases occuring at a 6% rate. Based on this assumption, the population of Bujumbura by the end of 1987 would reach 277,000, considerably more than is estimated in this report.

Census information available to date does not provide estimates of population in secondary cities, as it does for Bujumbura. However, a number of other sources surmise that the population of Gitega, the second largest city, is about 20,000 inhabitants today, while that of Rumonge, the third largest, is estimated to have slightly less than 8,000 persons. Growth in the secondary cities will depend on the Government's success in decentralizing growth throughout the country, and particularly on efforts to relocate Government functions to Gitega.

2. Income Distribution

Both the Dayer Survey and the SNES Survey show similar income distribution curves. Both were carried out at roughly the same time, with the Dayer Survey being conducted in the Spring of 1978, and the SNES Survey covering the year up to November 1979. The SNES Survey denotes that a smaller percentage of families have incomes in the lowest income bracket, while a larger percentage of families area found in the upper income brackets. Generally, each survey tended to confirm the pattern of income distribution found in the other.

Both surveys also found that family expenditures exceed reported income by a significant degree, which reflects both the reluctance of families -- and particularly low income families -- to reveal true incomes, as well as the likelihood that many families simply do not report incidential income, but only salaries and fixed income. Only families living in upper income neighborhoods reported incomes in excess of expenditures. Both surveys concluded that expenditures were a truer reflection of incomes than incomes actually reported by the respondent families. The income distribution figures shown on Table I follow that rationale.

Table I

Comparison of 2 Income & Expenditure Surveys

1978 — Bujumbura Incomes Only

Dayer Survey

Income Range	%	% Cum.
0- 2,500	6.5	6.5
2,500- 5,000	11.	17.6
5,000- 10,000	21.7	39.3
10,000- 15,000	18.5	57.8
15,000- 20,000	10.6	68.4
20,000- 35,000	15.5	83.9
35,000- 50,000	7.3	91.2
50,000- 75,000	5.0	96.2
75,000-100,000	1.5	97.7
over 100,000	2.3	100.0

Median Income: FBr 12,850

SNES Survey

Income Range	%	% Cum.
0- 6,000	20.5	20.5
6,000- 8,000	10.7	31.2
8,000- 12,000	18.2	49.4
12,000- 18,000	16.3	65.7
18,000- 24,000	12.7	78.4
24,000- 40,000	4.9	83.3
40,000- 80,000	8.7	92.0
80,000-120,000	3.2	95.2
over 120,000	4.8	100.0

Median Income: FBu 12,000

Our analysis of the two surveys is that the Dayer Survey is the more thorough, due to the fact that it was carried out in a much more manageable period of time than the SNES Survey, and the professional supervision of the interviewees appeared to be tighter. However, due to the similarity of conclusions in both, it would have been equally possible to employ the SNES Survey as the basis of the income distribution analysis in this report.

The SSA Mission updated the Urbaplan income figures for their report. Those percentages differ little from the Dayer figures, on which Urbaplan relied for basic data. For example, Urbaplan indicated that 6.7% of families fall in the lowest income bracket, while Dayer gives a figure of 6.5%, a negligible difference. The SSA also updated incomes from 1979 to 1983, by assuming an average annual increase in income of 2%, which is said to be the maximum permitted today for increases in government salaries.

For estimates of income distribution, this report adopted the Dayer income figures assuming that income distribution patterns has not changed since 1978. It was also assumed that incomes have increased at a faster rate than incomes reported in the SSA, based on the interpretation of government pay increases in two instances, as well as the assumption that pay increases in the private sector generally follow those in the public sector, but particularly in Burundi where the Government plays a preponderant role in employment. In July, 1980, the Government decreed a 10% across the board increase for all government employees. Then in 1981, the government provided all its employees with a housing allowance equal to 25% of base salary, while parastatals followed along with a housing allowance also, although for some parastratal workers the allowance was less than 25%. Fewer than 10% of all government employees today use their housing allowance to pay for government provided housing, so in effect, the housing allowance became a pay increase for the vast majority of government and parastatal employees. Moreover, the manager of the World Bank Sites and Services Project estimates that incomes have increased by about 28% since that project was appraised in 1980, which is reflected in increased income eligibility guidelines. Accordingly, incomes in this report were updated by 35% since 1978, to reflect estimated real incomes today in Bujumbura. As stated earlier, no comparable excercise can be carried out for the secondary cities.

The median income tabulation rises therefore from about FBu15m000 in the SSA to FBu17,260 in this report, reflecting a difference of about 15%.

In this report, as well as the SSA, family or household income was estimated, not just salaried income. The Dayer Survey reported that, on the average, salaries comprised about 71% of family income, while the remainder was derived from other sources, generally commercial activities. In qualifying beneficiaries for the World Bank-financed project, only salary-based income is considered as criteria for eligibility, due to the difficulty in ascertaining and confirming non-salary derived income. For most HG-financed projects, family income is the preferred selection criteria, rather than salaries, and in that case, prospective beneficiaries of a HG project here in Bujumbura could have their salaries adjusted by a figure not to exceed 30% in order to relate salaries to total income.

3. Housing Market

Several factors bring into question the size of the market for a HG project. In the first place, a relatively small number --estimated at 6% of the population-- are salaried workers, which eliminates the vast majority of the countrywide population from consideration for participation in formally constructed housing projects, although a much greater proportion of Bujumbura's population is salaried. Secondly, the urban population comprises only about 5% of the nation's population, with the bulk of the urbanites living in Bujumbura. Thirdly, foreigners comprise almost half of the population of Bujumbura, many of whom, if not all, are ineligible to participate in government-sponsored projects. All these factors severely limit the market for government housing, in spite of the overwhelming need and relatively poor condition of the current housing stock.

a) Housing Conditions

The Dayer Survey provided statistical date on conditions of the housing stock in Bujumbura, including the type of materials used for the construction of roofs, walls and floors, and the availability of water and sanitary services. These calculations were based on incomes, thereby categorizing housing conditions by income group. It was possible to therefore estimate the percentage of homes in each income category that was unacceptable as applied to housing standards in Bujumbura, recognizing that standards, particularly with respect to water and sewage services are quite minimal. Estimates of housing need therefore range from 80% of all low income family homes, that is families living under unacceptable living conditions, to a completely satisfied need for upper income families. (See Table 2.)

b) Housing Needs

By applying the need estimates for each income group to the number of households in each group, it is possible to estimate the number of families living in unacceptable housing. For example, it is estimated that about 6,200 families in Bujumbura have incomes between FBu6,800 and 13,500 monthly. Of this number, approximately 45% are foreigners --both African and non-African-- and given current GRB policy, they would not be eligible to participate in government-sponsored housing programs. While there is some indication that government may relax that policy, it is currently being applied to the World Bank-financed Sites and Services Project. Therefore an estimated 2,785 families of foreign nationality in this income group must be excluded as part of the potential market group, leaving only 3,415 families. Assuming further that at least 70% of the remainding families do not need housing (again see Table 2 on Housing Conditions), it is concluded that of the original 6,200 families, 2,390 families form the overall market group within this income category. Total housing need in Bujumbura for all income groups is estimated at about 9,000 units.

c) Current Effective Demand

Translating housing need into effective demand for a specific housing project is even more difficult than estimating need. Some considerations involved in estimating effective demand is the willingness of a prospective

Table 2

% of Family Dwellings with
Various Unacceptable Housing Conditions

Bujumbura - 1978

Monthly Income Range FBu	Non-Perm Walls- inc.adobe	Non-Perm Walls- exc.adobe	Permeable Roof	Water Outside House	Latrine Outside House	% Need Estimated
0- 2,500	83.8	(21.2)	38.3	98.0	100.0	80%
2,500- 5,000	85.0	(17.5)	19.9	98.8	97.6	80%
5,000- 10,000	79.1	(8.8)	16.1	94.0	93.6	70%
10,000- 20,000	67.1	(5.6)	9.9	85.7	89.4	60%
20,000- 50,000	44.1	(2.5)	2.5	61.5	65.2	40%
50,000-100,000	35.0	(2.5)	7.5	42.5	55.0	20%
100,000-250,000	30.8	-	-	38.5	46.2	-
+ 250,000	-	-	-	-	10.0	-

Column 1-- Walls of adobe or a less acceptable material.
2-- Assuming adobe is an acceptable wall material.
3-- Roof made of a material that is neither permanent nor impermeable.
4-- Water supply not piped into the home.
5-- Sanitary facility is outside main living unit
6-- NCSI estimate of the percent of homes that are unacceptable and should be replaced or substancially upgraded.

NOTE: Monthly Income figures are for 1978, the date of the Dayer Survey.

Source: CSI, based on data from Dayer Survey, 1978.

beneficiary to relocate, to incur new debt, or to buy a new home rather than improve the existing home, and his preference for the style, design and amenities of the new house. But given the strong need for housing in Bujumbura, it is assumed that 25% of all families in each income group would comprise the effective demand for a HG project, although the exact project has yet to be defined and designed. Normally such a percentage figure would be considered on the high side, and certainly open to criticism.

Given the terms and conditions of a possible HG loan, the target group for an AID housing program can be identified. Families with incomes below FBu6,800 (US$75), which comprise 17.6% of all Bujumbura families, probably do not have sufficient disposable income to undertake the obligations of a mortgage loan, and therefore are excluded from consideration. On the other hand, families with incomes in excess of the median income level, estimated at FBu17,260 are for the most part ineligible to participate, although some families with incomes up to FBu20,000, which is the 57.8 percentile level might participate. So effectively, some 40% of all families needing and eligible for housing comprise AID's market group. Based on these calculations, we estimate that the effective pent-up demand for a HG project will not exceed 1,035 units in Bujumbura (see Table 3).

d) Effective Demand--New Family Formation

Given estimates of population growth, and applying many of the same assumptions for pent-up demand, the demand within the identifiable target group generated through the formation of new families in Bujumbura over the next four years can be estimated. However, instead of assuming that 45% of Bujumbura residents area foreigners, the percentage is reduced to 35% on the assumption that most of the increase due to immigration (approximately one-half will consist of Burundians. Moreover, the effective demand ratio is increased to 50% (from 25%), based on the assumption that newly-formed families for the most part are actively seeking a shelter solution. Effective demand from new family formation for the period 1984-87 inclusive can be estimated at 800 units for Bujumbura alone (See Table 4).

e) Effective Demand--Secondary Cities

Although information on population, housing conditions, and incomes are scanty or nil in secondary cities, effective demand is estimated in those cities to be approximately 10% of that in Bujumbura over the same four year period and including current and new family formation demand. This translates into an effective demand of about 200 units or an average of 50 units a year in secondary cities.

Total effective demand for a HG program in Burundi will not exceed 2,000 over the period 1984-1987. Permitting foreigners to participate in the program may double the effective demand.

Issue III: General Economic Considerations

The Office of Housing (PRE/H) has contracted with a consultant at the George Washington University (Washington, D.C.) to prepare an external debt analysis of Burundi, in the context of the country's ability to repay an HG loan. This

Table 3

Effective Demand Analysis

Bujumbura — As of the end of 1983

Monthly Income Range (FBu) 1/	% of Population 2/ %	Cum	# of families (1983) 3/	Less 45% Foreign-ers 4/	# of Burundian Families 5/	% Need 6/	# of Families Needing Housing	Effective Demand HG Program 7/	
0- 3,400	6.5	6.5	1,855	(835)	1,020	80%	815	NA	*
3,400- 6,800	11.1	17.6	3,170	(1425)	1,745	80%	1,395	NA	*
6,800- 13,500	21.7	39.3	6,200	(2785)	3,415	70%	2,390	600	**
13,500- 20,000	18.5	57.8	5,285	(2380)	2,905	60%	1,745	435	**
20,000- 27,000	10.6	68.4	3,030	(1365)	1,665	60%	1,000	NA	***
27,000- 47,000	15.5	83.9	4,430	(1995)	2,435	40%	975	NA	***
47,000- 68,000	7.3	91.2	2,085	(940)	1,145	40%	460	NA	***
68,000-100,000	5.0	96.2	1,430	(645)	785	20%	155	NA	***
100,000-135,000	1.5	97.2	430	(195)	235	20%	45	NA	***
over 135,000	2.3	100.0	655	(295)	360	0%	--	NA	***
Totals	100.0		28,570	(12860)	15,710		8,980		

* 17.6% of families have incomes too low to participate

** Total Effective (Pent up) Demand as of the end of 1983 is 1035 units

*** 42.2% of families with incomes too high to participate

1/ Updated from 1978 Survey by Dayer, by an estimated 35%.

2/ No charge in income distribution figures in 1983 from 1978.

3/ Given an average of 6.3 persons/family.

4/ Government policy excludes foreigners from GRB housing.

5/ Total # of Burundian families only in Bujumbura.

6/ % of Burundian families living in unacceptable housing. Taken from Table 1.

7/ Assuming 25% of all needy families would participate in the HG financed housing program.

Source: NCSI, based on data from Dayer Survey, 1978.

Table 4

Effective Demand — New Family Formation

Bujumbura: 1984-1987

	1983	1984	1985	1986	1987
a) Total Population @ a 5% annual growth rate:	180,000	189,000	198,500	208,500	219,000
b) New Total Population:		9,000	9,500	10,000	10,500
c) New families based on 6.3 persons/family:		1,425	1,500	1,585	1,665
d) Excluding 35% of c) who are non-citizens:		500	525	555	585
e) Potentially eligible new families:		925	975	1,030	1,080
f) 40% of e) who qualify under HG conditions		370	390	410	430
g) 50% of f) who comprise effective demand for an HG program		185	195	205	215

Source: NCSI

analysis is attached as Annex 1. In addition to the issue of external debt, three general economic considerations came to the attention of the NCSI/PADCO team:

1. One of the principal advantages of a HG loan to a developing country is that it provides foreign exchange on a long-term basis. Where housing is built largely with local materials, the country can use most of the HG proceeds for investments which will generate foreign exchange in order to repay the HG loan, as well as assist in its overall balance of payments. Up to the present, however, SIP-developed housing has included a high percentage of imported construction materials, and should this practice continue, the advantage of a HG loan for Burundi will be diminished. SIP has indicated a willingness to utilize to a greater degree locally-produced materials, and in fact, to make HG housing affordable to below median income families, the use of such materials will be necessary. In discussing the possibility of a HG loan with Burundian officials, it will be necessary to stress the importance of using local materials, as well as the opportunities the HG presents for investments which will generate foreign earnings. It may be prudent to tie the HG loan not only to housing production, but also to other investment projects as part of a national development strategy to ensure that loan proceeds are efficiently utilized.

2. Burundi has generally not borrowed foreign exchange on the international commercial markets, but has relied heavily on donor grants and loans on concessionary terms. In the last year or so, the government has borrowed at commercial rates to a limited extent for coffee and sugar processing plants, but these commercial loans have been in conjunction with concessionary loans, bringing the total cost of financing well below commercial rates. On several occasions, Burundian officials expressed their concern to the NCSI/PADCO team about the high cost of HG funds compared to their past experience.

3. The effective market demand for housing by below median income families is small, estimated at about 2000 units between 1983 and 1987. In turn, a HG loan in the range of $5 million to $7.5 million could essentially meet total effective demand. This possibility provides AID with the opportunity to bring about changes which will have a far-reaching and beneficial impact on national fiscal policy. SIP falls under the auspices of the Ministry of Public Works, Energy and Mines (MTPEM) which invests in infrastructure development and public enterprises. In 1982, MPTEM's expenditures accounted for approximately 41 percent of the government's total investment outlay. The failure to adopt a full cost recovery policy has resulted in growing unmet obligations on the part of the government. Between January and November 1983, the unmet obligations to SIP alone --which largely represent housing finance subsidies-- are an estimated US$2.18 million which is equivalent to over 8 percent of the investment budget's deficit in 1982 and over 6 percent of the projected deficit for 1983. MTPEM carries out other projects for which costs are not recovered, such as development of roads and water systems. By bringing about an awareness of the long-term detrimental impact of these subsidies, and requiring SIP and MTPEM to move toward a policy of full cost recovery, the HG program could substantially reduce budget deficits resulting from housing programs as well as other development activities of the government.

Issue IV: Technical Assistance

As indicated in the previous discussion of SIP's operations, it is considered important that AID provide SIP with appropriate technical assistance to ensure that it has the capacity to efficiently carry out a HG project. For the most part, this assistance can be provided through short-term consultant contracts, with advisors spending up to several weeks in-country to work with SIP. The general areas of needed technical assistance are:

1. Financial management, including systems design

2. Project design for a HG project

3. Policy development

4. Other areas of specialized technical assistance, as identified during project implementation

It is recommended that the provision of technical assistance, and the commitment and disbursement of HG loan proceeds, be paced so as to establish objectives or "benchmarks" for SIP'S institutional development. In doing so, SIP would be required to demonstrate satisfactory performance in achieving certain objectives before the next phase of assistance would be provided.

Prior to any substantive assistance or commitment of resources, SIP and the Ministry of Public Works, Energy and Mines (MTPEM) should be required to agree in principle to the following:

1. SIP will adopt a financial management system which provides adequate reporting for cost control by program, and will permit effective control over income, expenses, properties and other assets.

2. SIP and MTPEM will review the current policy of subsidizing civil servant housing, and will adopt measures to significantly reduce subsidies and concurrently move toward a policy of full cost recovery in all of SIP's programs.

3. SIP will review its policy of limiting eligibility to only civil servants, in the context of AID's analysis of effective demand for housing by below median income families.

4. SIP will be willing to accept technical assistance from AID, as deemed necessary by AID to effectively carry out an HG project.

Once these general agreements are reached, the first phase of technical assistance can be carried out by a two-member Project Paper team. This team will be in-country for two weeks, with time allocated for follow-up writing. This team should consist of a technical person/architect and policy developer/planner which will do the following:

1. Work with SIP in designing a project which will be affordable to below median income families.

2. Work with SIP and MTPEM in revising existing policies related to subsidies, cost recovery and eligibility under SIP's housing programs.

3. Prepare a Project Paper.

Assuming that agreement is reached on project design and policy changes, the next stage of technical assistance will be handled by a financial systems specialist and an accountant who will work with SIP for several weeks to design and implement appropriate accounting systems, and to perform an audit of SIP's operations. Included in this task will be the development of a collection system under the HG program, which may be carried out in conjunction with a local bank or solely by SIP's staff, depending on the advisors' recommendations. A period of two to three months should elapse, providing a trial period for the new systems, after which time the financial systems advisor will return to Burundi to evaluate the effectiveness of the new systems and make any modifications.

Once the above steps have been satisfactorily undertaken, SIP should be in the position to begin implementation of a HG project. At least during the initial stages of implementation, RHUDO personnel or contract advisors should periodically visit SIP to monitor how the project is being carried out, provide needed technical assistance and identify areas of assistance still to be provided by specialists. Areas of subsequent technical assistance could include marketing and account collections.