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UNCLASSIFIED

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

ECUADOR

PROJECT PAPER

SECONDARY CITIES LOW INCOME HOUSING

AID/LAC/P-100

Project Number: 518-0037
HG-518-HG-006

UNCLASSIFIED

2

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: A (A = Add, C = Change, D = Delete)

Amendment Number: ______

DOCUMENT CODE: 3

2. COUNTRY/ENTITY: ECUADOR

3. PROJECT NUMBER: 518-0037 518-HG-006

4. BUREAU/OFFICE: LAC 05

5. PROJECT TITLE (maximum 40 characters): Secondary Cities Low Income Housing

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 12 DD 31 YY 85

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

A. Initial FY 83 B. Quarter 1 C. Final FY 85

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE		FIRST FY 82 B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total						300	300
(Grant)		( )	( )	( )	( )	( )	( )
(Loan)		( )	( )	( )	( )	( )	( )
Other U.S.	1. HG	25000		25000	25000		25000
	2.						
Host Country							
Other Donor(s)			5000	5000		13800	13800
TOTALS		25000	5000	30000	25000	14100	39100

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	C. 2. Loan	D. OBLIGATIONS TO DATE 1. Grant	D. 2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	E. 2. Loan	F. LIFE OF PROJECT 1. Grant	F. 2. Loan
(1) SD	723	867				300		300	
(2) HG	723		862				25000		25000
(3)									
(4)									
TOTALS									

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each): 864 | 865

11. SECONDARY PURPOSE CODE

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

A. Code	BU	TECH
B. Amount	25300	25300

13. PROJECT PURPOSE (maximum 480 characters)

Assist the GOE implement its housing policy objectives of: (i) directing greater resources to low income housing needs in secondary cities and smaller towns; (ii) decentralizing housing program administration; and (iii) implementing lower cost construction technologies and mobilizing local resources from municipalities and private sector developers.

14. SCHEDULED EVALUATIONS

Interim MM YY 11 83 | MM YY 11 84 | Final MM YY 12 85

15. SOURCE/ORIGIN OF GOODS AND SERVICES

[X] 000 [ ] 941 [X] Local [ ] Other (Specify) ______

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

17. APPROVED BY

Signature: John A. Sanbrailo

Title: USAID Director

Date Signed: MM DD YY 07 19 82

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

AID 1330-4 (8-79)

II

BEST AVAILABLE DOCUMENT

GUARANTY AUTHORIZATION

PROJECT NO. 518-HG-006

PROVIDED FROM: Housing Guaranty Authority

FOR : The Government of Ecuador

Pursuant to the authority vested in the Assistant Administrator, Bureau for Latin America and the Caribbean, by the Foreign Assistance Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance of guaranties pursuant to Section 222 of the FAA of not to exceed Twenty-five Million Dollars ($25,000,000) 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 Ecuador.

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

1. Term of Guaranty: The loans may extend for a period of up to thirty years (30) from the date of disbursement and may include such terms and conditions as shall be acceptable to A.I.D. The guaranties of the loans shall extend for a period beginning with disbursements of the loans and shall continue until such time as the Investor has been paid in full pursuant to the terms of the loans.

2. Interest Rate: The rate of interest payable to the Investor pursuant to the loans shall not exceed the allowable rate of interest prescribed pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans made in the long term U.S. capital markets.

3. Government of Ecuador Guaranty: The Government of Ecuador shall provide for a full faith and credit guaranty to indemnify A.I.D. against all losses arising by virtue of A.I.D.'s guaranties to the Investor or from non-payment of the guaranty fee.

III

BEST AVAILABLE DOCUMENT

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

5. Other Terms and Conditions: The guaranties shall be subject to such other terms and conditions as A.I.D. may deem necessary.

Otto Reich
Assistant Administrator
Bureau for Latin America and the Caribbean

8-5-82

Clearances:
PRE/HUD:PKimm ____ Date ____
GC/HUD:MWilliams ____ Date ____
LAC/DR:DJohnson ____ Date ____
GC/LAC:BVeret ____ Date ____
FM/LD:ESOwens ____ Date ____

GC/H:MJ...S:prj:07/26/82

SECONDARY CITIES LOW INCOME HOUSING

PROJECT PAPER

TABLE OF CONTENTS

LIST OF ANNEXES

SUMMARY AND RECOMMENDATION

A. Introduction

The Government of Ecuador that assumed office in August 1979 is strongly committed to major economic and social reforms that can better confront Ecuador's widespread poverty and its serious development problems. One of the first actions of the new democratic government was the preparation of a National Development Plan for 1980-84. This Plan gives highest priority to promoting economic growth and to meeting the needs of the country's low income families. Special attention is being directed to improving living conditions in Ecuador's urban slums and in secondary cities, smaller towns, and rural areas.

The newly elected GOE administration initiated a number of significant development policies and programs in 1980-81, particularly in rural development, administrative reform, energy development, and low cost housing and integrated urban development. Significant efforts have been made to eliminate illiteracy, increase agricultural production, and reduce price subsidies in key areas such as gasoline, electricity, credit, and basic food items. All the international agencies agree that the GOE has been moving in the right direction in addressing fundamental development problems that had been largely ignored in the 1960s and 1970s.

Unfortunately, Ecuador's reform program began just as the country's "mini-oil boom" of the 1970s was ending and the economy began to deteriorate. Throughout 1981-82, declining petroleum and agricultural export revenues, the worldwide recession, and growing budget and balance of payments problems seriously restricted the GOE's ability to carry out or expand many of its most important development initiatives. A recent IBRD study on Ecuador indicates that the outlook for the coming years (1983-85) is even bleaker as declining exports and economic growth rates and continuing budget shortfalls will further limit the GOE's ability to attack the country's major development problems.

In addition to these economic problems, Ecuador also has had to confront serious political and institutional difficulties. Throughout 1980, political disagreements between the GOE executive and legislature slowed down many new development programs. The Ecuador-Peru border conflict of 1981 diverted resources and attention away from development programs. The death of President Roldos in an airplane accident in May 1981 disrupted the political balance and momentum of the country. Finally, Ecuador's historic institutional and managerial weaknesses have proven much more difficult to deal with than originally anticipated by either Roldos or current President Hurtado.

For these reasons, the GOE has been unable to meet all of the very high and unrealistic expectations created by a return to a democratic government despite some excellent progress and new beginnings. Clearly, expectations among many Ecuadoreans have far outrun the financial and institutional capacity of the country to meet these expectations. With a declining economy, a major devaluation of the sucre in May 1982*, and rising inflationary pressures, social and political tensions are growing, particularly as the 1984 national elections get nearer. Already, urban land invasions in Guayaquil and in some secondary cities are increasing. Labor unrest and student demonstrations are growing as standards of living begin to decline because of the recent devaluation. Should Ecuador's democratic government be unable to continue its significant new initiatives because of a lack of financial resources, major questions could be raised about the ability of a democratic regime to undertake fundamental development programs.

B. Background and Conceptual Framework

One of Ecuador's most serious problems is its lack of low income housing and its growing urban poverty in Guayaquil, Quito, and almost all secondary cities and smaller towns. The GOE estimates that there is a nationwide housing deficit of approximately 600,000 units which includes housing that does not meet minimum shelter standards. This problem has been exacerbated by Ecuador's very high rate of rural to urban migration particularly to secondary cities. Many secondary cities have higher population growth rates than either Guayaquil or Quito and large slum areas have formed in and around most of these cities.

To meet the country's growing demand for housing, A.I.D. provided technical assistance and seed capital in the early 1960s to help establish the Ecuadorean Housing Bank (BEV) and the private sector savings and loan system. However, throughout the 1960s and 1970s, BEV and the S&Ls limited their financing to relatively small scale middle and upper middle-class housing projects. Other Ecuadorean agencies (the Social Security Institute, credit unions, housing cooperatives, private banks) also largely concentrated on providing their limited mortgage financing to families well above the country's median income.

* On May 13, 1982 the GOE officially devalued the sucre for the first time in 12 years from S/25 to S/33 per dollar. This measure is intended to improve the country's balance of payments and encourage exports. While politically a very difficult decision, it is indicative of the Hurtado government's determination to implement necessary reforms.

During these decades, several small low income housing projects were attempted particularly following the establishment of the GOE's National Housing Board (JNV) in 1973. These projects were never considered a high priority by BEV or JNV, they were not replicated and they provided an insignificant number of low income housing units. USAID even worked closely with the BEV in the early 1970s to develop a large national low income housing program involving sites and services, piso-techo, and other progressively developed housing solutions that could be financed by an A.I.D. Housing Guaranty. However, this program was rejected by BEV's management because of its disagreement with the appropriateness of such housing solutions for Ecuadoreans and for BEV financing. Accordingly, a HG loan was never finalized.

There was also little or no priority attached to developing working relations between BEV/JNV and municipal governments and mobilizing resources from local housing developers such as cooperatives and other private organizations. The few housing projects that were undertaken were often constructed outside of any urban planning framework, involved little or no coordination with local municipalities, and were not integrated with complementary physical and social infrastructure and community services. There was little concern for lower cost construction techniques and standards or for integrated urban development approaches that could better address the country's rapidly growing housing and urban poverty problems.

With the return to a democratic government in August 1979, major policy and programmatic changes occurred in the Ecuadorean housing sector. The new administration entered office with a strong commitment to significantly expand housing that could be afforded by low income families. All major GOE officials, including President Hurtado, have spoken out continuously on the high priority that their administration is placing on low income housing. The GOE's National Development Plan and its housing planning documents further formalize this priority. There is now an intense interest in using new lower cost approaches such as sites and services and core housing, testing various integrated urban development approaches, and improving coordination between BEV/JNV, and municipalities, and other developers.

One of the government's first major actions was to convert JNV and BEV into agencies that mainly construct and finance low income housing and to launch the largest low income housing program in the history of the country -- the construction of 10,000 units in various Guayaquil slum areas now known as "Plan Roldos". In addition, in 1980 the GOE finalized Ecuador's first international loans for major low income housing and integrated urban development programs. A $31 million IBRD loan for the Guayaquil slum areas was obtained to finance urban upgrading, sites and services, core housing, and home improvement and small business loans. Shortly after, a low income shelter and integrated urban development program (Solanda) was developed for the slum areas of southern Quito and a $20 million A.I.D. Housing Guaranty and a $630,000 grant were approved to implement this program. (With over 5,000 units, Solanda is the largest low income housing program ever undertaken in Quito.)

The IBRD and A.I.D. loans have not only been instrumental in reinforcing the GOE's new low income housing policies but they also began a process of encouraging better working relations between JNV/BEV and the municipalities of Guayaquil and Quito. Likewise, A.I.D. financing of Solanda is allowing the JNV/BEV to test a model that involves participation by both the Municipality of Quito and a local private organization (the Mariana de JesÜs Foundation) which are providing land, complementary physical and social infrastructure, and community services. This model (involving coordinated action by JNV/BEV, a municipality, and a local private developer) could then be replicated in other urban areas including secondary cities.

In addition, the GOE also began a planning process for better meeting the shelter needs of secondary cities and smaller towns. The GOE's National Development Plan calls for a major decentralization program to improve employment and living conditions outside of Quito and Guayaquil so as to reduce the growing migration to the country's primary urban centers and to develop more balanced settlement patterns. To support this effort, in 1981-82 JNV/BEV completed applications to IBRD and to A.I.D. for loan financing to assist the GOE implement its low income housing program in secondary cities and smaller towns.

In May 1982, the IBRD approved a $35.7 million National Low Income Housing Project that includes financing for projects in Quito and nine secondary cities. This IBRD loan represents an important first step toward better serving the low income housing needs in secondary cities. However, as discussed in greater detail in Issue No. 1 below, there are significant gaps in the JNV/IBRD secondary cities housing program and there still exists a large unmet nationwide demand for low income housing finance. To fill these gaps, a broader and more flexible HG sector loan is needed.

The sector loan approach is appropriate because it focuses attention on supporting policy implementation. USAID is, of course, also interested in assisting the GOE overcome its rapidly growing housing deficit. However, USAID's greater concern is to bring about the institutional, technological, and financial impacts anticipated under the project in order to help JNV/BEV carry out their policy objectives discussed in detail later in this Project Paper. Thus, the individual housing subprojects to be financed are not the principal ends of the project. They represent means of helping JNV/BEV implement and expand the policy, program and institutional directions being enunciated and attempted by the GOE.

C. Project Description

The goal of the project is to improve the quality of life for low income and disadvantaged families in secondary cities and smaller towns whose monthly income is below the national median for urban areas outside of Quito and Guayaquil of S/4,300 ($ 130) in 1981 prices. The project purpose is to assist the GOE implement its housing policy objectives of: (i) directing greater resources to low income housing needs in secondary cities and smaller towns; (ii) making JNV's institutional infrastructure more responsive to local needs by strengthening and expanding JNV Regional Offices and decentralizing housing program administration; and (iii) increasing the number of beneficiaries by implementing lower cost construction technologies and mobilizing local resources from municipalities and private sector developers.

The Secondary Cities HG Sector project will finance housing solutions for an estimated 13,000 families in urban areas outside of Quito and Guayaquil. (The number of benefitting families is slightly less than the total number of loans since in some cases families will be eligible for both new construction loans for partial solutions and subsequent home improvement loans.) By the end of the project period, it is estimated that the share of the JNV/BEV's new investment in such urban areas, will increase to 50 percent compared to three percent at the beginning of the current GOE administration. Also, the long repayment and grace periods on the HG loan will help strengthen BEV's financial position so that it can continue to expand its financing for low income housing in the 1980s.

Through technical assistance and training, the project will support the JNV's administrative decentralization efforts by bringing about improvement in the JNV Regional Offices so that they may better develop and implement low income housing projects based on local conditions. Strengthening and developing its Regional Offices is an indispensable institution building measure that JNV must undertake if it is to have a capacity to meet housing needs outside of Quito and Guayaquil. The Regional Offices are in the best position to identify and prioritize local problems. With training and technical assistance, they will be able to develop locally suited progressive housing solutions that utilize lower cost local building materials (e.g., wood, adobe, bamboo, etc.). Furthermore, the HG project will encourage JNV Regional Offices to work with municipalities towards the adoption of more appropriate construction standards and ordinances for low income housing, including infrastructure requirements. They are also better able to mobilize complementary resources from municipalities and other local developers such as cooperatives, builders, PVOs, and regional development agencies, as is being done in the Solanda Project.

The housing solutions to be financed will be grouped into subprojects developed by JNV Regional Offices. Over thirty subprojects are expected to be developed and financed representing different low income housing responses to Ecuador's diverse social, cultural, and geographic conditions. The HG and complementary technical assistance will serve as catalysts for local housing innovations and experimentation. JNV institutional development will be encouraged through a process learning approach (or learning by doing). The HG sector program is being left flexible as to specific subprojects to be funded so as to encourage JNV Regional Offices to take a lead role in planning and organizing subprojects that respond to local housing problems and that meet national policies and priorities. Specific criteria exist on what types of subprojects are eligible for HG loan funding. JNV/BEV headquarters will operate as an ICI in receiving and approving specific low income housing subprojects proposed by Regional Offices. Regional Offices will then undertake and/or monitor subproject implementation.

The housing solutions will consist of new construction and the upgrading of existing but deficient units. New construction will be on a progressive basis consisting of urbanized lots and sanitary cores ranging from 18 to 45 square meters. Innovations in acquisition and urbanization of project sites will be made to help reduce costs. Similarly, the use of local materials and local developers will be considered whenever practical as an additional means of holding down costs. Upgrading will include loans for home improvements as well as infrastructure improvements for communities and groups. In order to meet the income eligibility requirements of the project, JNV will have to apply cost saving practices and approaches such as described above on a scale unprecedented in its institutional history. It is expected that the project will assist JNV/BEV further demonstrate that such approaches are the only practical means of meeting the housing deficit and will become firmly entrenched within Ecuadorean institutions nationwide.

D. Implementing Agencies and Summary Financial Plan

Ministry of Finance (MOF): The MOF will be the Borrower of the HG funds and will enter into an agreement with BEV based on a similar agreement now in effect for the Solanda HG loan.

National Housing Board (JNV): JNV will be responsible for project promotion and implementation. It will provide staff resources for individual subproject preparation and execution through its Regional Offices. It will seek the participation of local developers where appropriate, set national priority areas for subproject development, strengthen its Regional Offices, and carry out staff training programs among other activities. In preparing and selecting subprojects, criteria will be utilized that are mutually agreed upon by JNV and USAID. JNV will present individual subproject proposals to USAID for approval. Once USAID approval is obtained, JNV will be responsible for arranging for the corresponding HG drawdown, monitoring subproject implementation, and preparing reports and evaluations.

Ecuadorean Housing Bank (BEV): BEV will handle the credit aspects of the project and will provide GOE counterpart funds of 25 percent of the long-term financing cost of the project. It will process homeowner applications for credit and make arrangements for monitoring and collecting repayments. The total BEV contribution to the project will be over $8.3 million.

Local Developers: Local developers are those groups which can contribute to the development of a specific subproject with community organization, land, or other appropriate resources. Such institutions include local municipalities, housing cooperatives, or other private groups.

Beneficiaries: The beneficiaries are families living in Ecuador's secondary cities and smaller towns with incomes below the national urban median income (1981 S/4,300) excluding Quito and Guayaquil. They will provide a downpayment of up to 20 percent of the cost of the new solutions. Total contribution of beneficiaries to the project will be over $5.3 million.

A.I.D.: A.I.D. will provide a $25 million Housing Guaranty loan (75 percent of the long term financing) so that the BEV can finance approximately 14,600 low income shelter and home improvement loans, and up to $300,000 in new grant funds for technical assistance and training. The staff of the USAID housing and Urban Development Division is being expanded to assist JNV/BEV with project implementation. USAID will be further backstopped by the technical resources available in RHO/PSA and PRE/HUD.

The total cost of the project is $39.1 million distributed as follows:

Table I-1

Summary Financial Plan
(thousands of U.S. dollars)

	A.I.D.	GOE	Beneficiaries 1/	Total
Housing 2/				
New Solutions	20,000	6,670	5,330	32,000
Home Improvements	5,000	1,670	-	6,670
Subtotal	25,000	8,340 3/	5,330	38,670
Institutional Development				
Long Term T.A.	115	-	-	115
Design Competitions	75	-	-	75
Studies	100	-	-	100
JNV Regional Offices 4/		120		120
Contingency	10	10		20
Subtotal	300	130	-	430
TOTAL	25,300	8,470	5,330	39,100

1/ Beneficiary contribution includes only downpayments for new solutions; the beneficiaries' own labor and contributions towards completing the progressive units is excluded.
2/ A breakdown of 80/20 has been used based on the estimated range of activities. Actual project experience may differ.
3/ GOE counterpart contribution represents 25 percent of subproject mortgage financing.
4/ Represents incremental costs of salaries of new positions, training, and mobilization inherent in strengthening JNV's Regional Offices.

E. ISSUES

1. Relationship between the IBRD National Low Income Housing Project and the HG Secondary Cities Sector Loan: The IBRD has recently approved a $35.7 million loan with the GOE for a National Low-Income Housing Project. That loan will finance 8,200 basic units and sites and services in specific projects already designed and 6,800 home improvement loans in Quito and nine secondary cities. There is a potential issue concerning the need for HG funding in light of this IBRD commitment.

GOE planning documents show a large gap in providing the housing units necessary to keep up with new family formation, to replace existing units deemed unfit for habitation, and to upgrade substandard units. These needs dwarf the resources available to the GOE. The GOE estimates that by 1984 there will be an accumulated demand in urban areas alone of approximately 600,000 dwelling units needed to replace or upgrade substandard units or to reduce overcrowding. Of this total, roughly 54 percent (or 324,000 units) is estimated to be derived from demand in urban areas outside of Quito and Guayaquil. Just for new family formation in these latter urban areas, some 27,000 units are required by families in the A.I.D. target group (i.e., monthly incomes below the national median for urban areas outside Quito and Guayaquil).

The Quito component of the new IBRD project is substantial. Some 3,000 of the new units to be constructed or 36.5 percent of the total will be in Quito. Also, an estimated 40 percent of home improvement loans to be financed under the IBRD project will be directed at the same families that receive the new basic units.

The 5,000 unit balance of the new solutions to be financed under the IBRD project are earmarked for the specific secondary cities of: Ambato, Esmeraldas, Quinindé, Riobamba, Santo Domingo de los Colorados, Babahoyo, El Empalme, Machala, and Quevedo. Of this amount, only about 3,000 units are estimated to be in the same price range affordable by the A.I.D. target group. Thus, there is an urgent and largely unattended need for the proposed A.I.D. resources in addition to the new IBRD loan.

Likewise, the IBRD loan is not directing resources to secondary cities in several key provinces (e.g., Manabi, Azuay, Guayas) that are important areas for the GOE's decentralization program. These provinces contain two of the six alternative settlement areas envisioned in GOE decentralization planning (i.e., Manta-Montecristi-Portoviejo, Cuenca-Azogues-Biblian) and the third province (Guayas) includes a number of secondary cities and smaller towns that are important alternative settlement areas for the large rural migration flowing into Guayaquil. Thus, there are significant geographic gaps not covered by the JNV/IBRD National Low Income Housing Project.

Moreover, while the IBRD loan and other donor assistance are providing technical assistance and training resources, there is little or no emphasis being placed on developing JNV Regional Offices and mobilizing local developers such as municipalities and private entities. The more flexible nature of the HG sector loan will encourage the development of Regional Offices by hav- ing them assume a lead role in subproject planning and organization. Strengthening its Regional Offices is an indispensable institution building measure that JNV must undertake if it is to sustain a long-term secondary cities program and further increase its capacity to meet housing needs outside of Quito and Guayaquil. The A.I.D. project will fill this institution-building gap.

Finally, the eligibility criteria for selecting subprojects under the HG loan will preclude financing new unit construction and home improvement loans in the secondary cities assisted under the IBRD loan without prior written approval of USAID. Such a provision in the implementation agreement will further differentiate the HG project from the IBRD loan. Clearly there is a need for both the A.I.D. and IBRD projects and the projects complement each other. There will be no overlap or duplication of resources between these two externally financed projects with respect to housing solutions financed.

2. <u>JNV/BEV Absorptive Capacity</u>: Given the delays in implementing the IBRD loan for low income housing in Guayaquil and the A.I.D. HG loan for Solanda in Quito, the JNV/BEV capacity to absorb the proposed A.I.D. Secondary Cities HG loan in addition to the new IBRD loan must be addressed.

With respect to the IBRD Guayaquil project, there have been delays of approximately one year in processing the various legal agreements and subagreements. Two of the project's three components depend on entities other than JNV/BEV, namely the Municipality of Guayaquil, the National Small Enterprise and Artisan Center (CENAPIA), and the private banking system. The project delays have been largely with these components. The IBRD points out that, in contrast, BEV/JNV is making good progress on the low income housing construction and home improvement loan component for which it is responsible.

Similarly, the implementation of the Solanda HG project is also about a year behind schedule. Unexpected labor disputes in the Mariana de Jesús Foundation and problems in processing the land donation were principal factors in this delay. Also, the unusually high interest rates in the U.S. capital markets in 1981 and at the beginning of 1982 contributed to a "go-slow" approach by the parties concerned. However, implementation planning for the project has been completed and the U.S. investor (Paine Webber) has now been selected. Infrastructure works at the site have begun using JNV/BEV counterpart.

Both the IBRD-Guayaquil project and the A.I.D.-Solanda HG project have been important learning experiences for JNV/BEV management and staff. The resulting increased familiarity with IBRD and A.I.D. procedures will facilitate implementation of the two new projects. Each of the new projects will provide for technical assistance to strengthen institutional capabilities in specifically selected aspects.

The design features of the proposed A.I.D. HG loan will increase JNV's absorptive capacity in two important ways. First, the focus on secondary cities is consistent with JNV's commitment to improve the institutional capacity of its Regional Offices. JNV's decentralization policy is well established and accepted within the GOE bureaucracy. The new positions needed to carry out this objective have been identified and JNV has the necessary authority and resources to fill these positions promptly. Second, at least 30 percent of the HG resources are to be used for subprojects that are promoted by other developers with the JNV. This will reduce the JNV's involvement in direct construction adminis ation, even though JNV will continue to have a supervisory role over these activities.

As indicated in the institutional analysis, BEV has a good financial management capacity and should be able to administer additional funds with little difficulty. This capacity will be enhanced by the computarization program planned under the IBRD program. The HG loan itself will have a very favorable impact on BEV's financial status, as described in the financial analysis. This impact will be from the interest spread as a result of the Ministry of Finance assuming the role of borrower and passing the resources on to BEV at 12 percent. Also, the long-term nature of the HG loan and the estimated ten year grace period will help strengthen the financial position of BEV.

Nevertheless, given A.I.D.'s and IBRD's shared interest in the institutional development of JNV/BEV, close collaboration will have to be maintained during project implementation. For this purpose, USAID will request JNV to take the lead in organizing regular joint meetings in which IBRD and USAID can jointly review progress and problems with JNV/BEV.

3. Need for Additional A.I.D. Grant Funds: The new IBRD loan to JNV/BEV includes financing for consulting services and training for JNV/BEV. Also, the previously approved Solanda HG loan project has a $630,000 grant component for technical assistance and training. By the end of FY 1982, $490,000 of these funds will have been obligated. The $140,000 remainder is planned to be provided within the USAID's FY 1983 approved OYB. Given these availabilities, the need for additional A.I.D. grant funds to support the HG loan project proposed herein is a potential issue.

The funds under the IBRD project are principally directed to assist BEV with the procurement and installation of a computer system to improve its financial mangement capability. Related technical assistance from local and international sources will assist BEV introduce a financial management system based on a computarized reporting system. Long-term assistance in developing a cost accounting system will also be provided. A series of short-term (one to two months) consultants will assist JNV staff in such aspects as housing technologies, self-help construction, and human settlements. Also local consultants will be hired to assist JNV with new project preparation. The IBRD project would also fund training both abroad and in Ecuador primarily in financial planning, management, and certain technical aspects of low income housing based on a staff training plan to be prepared by JNV/BEV.

The A.I.D. grant funds under the Solanda project are obligated in a joint agreement signed with JNV, BEV, the Mariana de Jesús Foundation, and the Municipality of Quito. Only the portions allocated to JNV and BEV are available to support activities not necessarily strictly related to the Solanda project. Approximately $266,000 under these components remain available for Solanda and other needs. Plans are to use these funds for short-term technical assistance, travel for training purposes, and in-country seminars and training. Topics include savings mobilization and financial planning for BEV, use of new construction materials and technologies, environmental protection, and structural design.

It is anticipated that some TDY services and training financed by the Solanda grant project will, in fact, be used to help implement the secondary cities project in several respects. However, there are additional needs that cannot be filled by either the Solanda grant or by the planned IBRD technical assistance.

First, an Ecuadorean professional will be contracted to assist JNV at the field level. The advisor would be contracted directly by USAID and would form part of USAID's HUD office during project implementation. The advisor would help expedite the project by providing technical advice to the Regional Offices and would assist in developing and implementing a reporting system. It would be inappropriate to attempt to use funds already under the Solanda grant agreement for this purpose. Second, design competitions will be financed to encourage the involvement of private sector Ecuadorean professionals in the generation of ideas and plans for using local materials and innovative approaches. This activity will complement the short-term technical assistance and training given to JNV staff under the Solanda grant. Third, selected municipalities would be assisted in improving their ability to participate in low income housing projects through studies and training programs performed by Ecuadorean firms. Technical assistance would be funded under the Solanda grant to help identify and prioritize the studies to be performed. However, the Solanda grant is not sufficient to carry out such studies, even on a pilot basis. The PID guidance cable expressed concern about the limited grant funds under the SDA appropriation account and suggested USAID explore alternative sources. While alternative sources have not materialized, the overall amount required has been reduced from the $500,000 estimated in the PID to $300,000. The annual requirements are minimal. The initial obligation of about $75,000 would be in FY 1983 with increments of $125,000 in FY 1984 and $100,000 in FY 1985. USAID expects to be able to program these amounts within its currently approved levels.

F. Project Committee

The Project Committee consisted of the following USAID members:

USAID/Ecuador

- John Miller, Housing and Urban Development Officer
- Carlos Luzuriaga, Economist
- Richard McClure, Controller
- Patricio Maldonado, Program Officer
- Robert Jordan, Chief Finance Officer
- Randy Roeser, Deputy Finance Officer

In addition the Commitee received substantial inputs and assistance from the following individuals:

- Mario Pita, Chief Regional Housing Officer, RHO/PSA
- Earl Kessler, PSC Housing Advisor, RHO/PSA
- Eliecer Fernandez, AID/W/FM
- Edward Robbins, National Savings and Loan League
- John Arenas, National Savings and Loan League
- Tova Solo, National Savings and Loan League

The following host country officials and consultants participated in the project design process:

- Ricardo Davalos, President, JNV
- Jose Ordonez, General Director, JNV
- Roberto Carrion, Director of National Planning, JNV
- Fernando Flores, Technical Director, JNV
- Reynaldo Posada, Consultant, JNV
- John Klein, General Manager, BEV
- Marco Guarderas, Credit and Finance Director
- Hugo Jativa, Financial Analyst

The Project was reviewed and approved by:

- John Sanbrailo, USAID Director
- Paul Fritz, USAID Deputy Director

G. Recommendation

This HG program can serve as a major catalyst for not only financing low income housing, but equally important, developing the institutional, technological, and financial capacity of JNV/BEV to implement an increasing volume of low income housing in all of Ecuador's secondary cities and smaller towns.

It will contribute to filling the gap between the GOE's strong commitment to addressing urban poverty and low income housing needs and its weak financial and institutional capacity for dealing with these problems. For these reasons, the project proposed herein is considered by the GOE, USAID, RHO/PSA, and the Country Team as one of the most important new activities in the FY 1982 A.I.D. Program in Ecuador.

The USAID Project Committee and RHO/PSA have judged the project to be technically, financially, economically, institutionally, socially, and environmentally sound and viable, and recommend that a $25 million Housing Investment Guaranty be approved as well as $300,000 in grant funds to provide technical assistance and other support for project implementation.

II. PROBLEM AND PROPOSED STRATEGY

A. Sector Analytic Framework

The analyses contained in this Project Paper are based on an impressive array of policy and programming documents developed by the GOE, A.I.D., IBRD, and other sources. An in-depth A.I.D. Shelter Sector Assessment was prepared by the Office of Housing in 1976 that compiled available data, analyzed constraints, and made recommendations. This Assessment remains valid as to its analysis of constraints and its recommendations. The Shelter Sector Assessment also served as the basic framework for preparing the housing and urban development strategy contained in USAID's approved CDSS and for developing the Integrated Shelter and Urban Development (Solanda) Project Paper approved in FY 1980 and the project proposed herein. The analyses contained in these latter documents were further updated in 1981-82 through a study prepared by the USAID economist on Problems of Human Settlements in Ecuador: Analyses for Developing a Housing and Urban Development Program in Secondary Cities. Several other studies were also utilized including reports on the IBRD National Low Income Housing Project approved in May 1982, an IBRD Urban Sector Study of Housing Finance in Ecuador, and an IBRD study entitled Ecuador: Economic Development Issues.

Basic Ecuadorean policies on low income housing and decentralized urban development are summarized in the GOE's National Development Plan for 1980-84 that closely parallel analyses and recommendations made in A.I.D. and IBRD studies. CONADE's Guidelines for Spatial Development of Ecuador provides a further in-depth presentation of the GOE's decentralization policies and programs. The National Housing Plan for 1980-84 produced by the National Housing Board (JNV) and the Ecuadorean Housing Bank (BEV) translates GOE housing policies into specific objectives and funding requirements and gives highest priority to low income housing with special emphasis on secondary cities and smaller towns. Various JNV technical documents (Normas Técnicas de Urbanizacion y Vivienda and Cartilla de Vivienda Rural) present JNV's commitment to lower infrastructure standards and to lower cost housing approaches. Finally, JNV has prepared a National Study of Housing Supply and Demand for 1980-84 that clearly identifies the large demand for low income housing nationwide.

Taken together, the above documentation analyzes the key problems and constraints in the Ecuadorean housing sector, defines policies and a strategy for overcoming these constraints, and lays out a five year program and financial requirements for carrying out new GOE low income housing policies. The sections below briefly summarize findings from these documents and present the framework for the sector project proposed herein for HG funding.

B. The Housing and Urban Development Problem in Ecuador

One of the most significant trends occuring in Ecuador over the past 30 years has been rapid rural to urban migration. In 1950 some 28.5 percent of the total population lived in urban areas (defined as all provincial and county capitals, a total of 115 cities and towns); by 1981 this percentage had risen to an estimated 44 percent. Ecuador's total population has been growing at about 3.4 percent a year, and the urban population has more than tripled over the past 30 years with an annual growth rate of 4.9 percent, or some 2.5 million persons.

While a majority of this migration has been from rural areas to small urban centers, a substantial share has gone directly to the larger cities. Considerable migration has also taken place from smaller to larger urban centers. An average of 27,600 persons per year, roughly one percent of the rural population of the country, migrated from rural to urban areas every year in the 1962-74 period (for which census data are available). The process of migration involves a trend to come first to small towns, then to secondary cities either to settle there or finally to move to the two large metropolitan areas of Quito and Guayaquil.

According to the most recent estimates, the urban housing deficit (quantitative and qualitative) in Ecuador is approximately 600,000 units projected to 1984, affecting approximately 80 percent of the urban population. At least 54 percent of this deficit or some 324,000 units is accounted for by urban areas outside of Quito and Guayaquil.

The deficit manifests itself in the Sierra in the illegally developed neighborhoods that offer low income families land on which to build but lack basic services, a situation that persists until the Municipality recognizes the settlement. Recognition does not come easily and extended periods of time pass before these families have access to water, sewerage, and electricity as well as all-weather streets, paths, and stairways. Another common situation in the Sierra is center city tenements in which families each occupy one room of an old house. Where water and sanitary facilities are available, they are shared among the many families crowded into what once was a single family home.

On the coast, squatter settlements, poorly planned if planned at all, crop up on marginal land subject to flooding or on hillsides too steep to technically and economically install infrastructure at some future date. The lack of potable water, accumulated garbage, and inadequate human waste disposal contribute to the high infant mortality rate and gastroenteritis and other health and social problems. To date, municipal and national level governments, confronted with the rapidly growing demand for housing and related urban infrastructure, have been overwhelmed by the magnitude of the problem mentioned above. They have often been unable to mount an adequate response because of unrealistic views about client groups, inappropriately high housing and infrastructure standards, and insufficient funds to implement a massive shelter program.

The priority given to Quito and Guayaquil for housing and infrastructure investments also has severely limited the ability of other urban areas to cope with the growth in demand for services. In secondary cities, the overcrowding in low income neighborhoods and the formation of perimeter slums lacking basic infrastructure are creating mounting health and social problems. These tensions, for example, recently came to a head in the form of violent civil disturbances in Chone, a coastal town of 32,000. Essentially, the entire town went on strike in protest of lack of progress in public works slated for the town. Policemen were injured and property damage was widespread. Similar civil disturbances occurred previously in the Sierra secondary city of Ambato and the coastal city of Manta. (More strikes and protests of this nature can be expected as the country approaches the 1984 elections.) Rapid growth in these urban areas is projected for the rest of the century, thereby aggravating an already difficult and potentially explosive social situation.

The number of towns with more than 25,000 but less than 100,000 persons increased from three in 1950 to 13 by 1980, reflecting a significant population influx. Some secondary cities are expected to continue to grow substantially. By 1986 it is projected that there will be eight cites (not including Quito and Guayaquil) with more than 100,000 inhabitants; these will account for 35 percent of the country's urban population. Table 1 of Annex III, Exhibit A, shows that coastal secondary cities in particular have been experiencing an annual growth rate well above the national average, higher even than Quito and Guayaquil.

Table 2 of Annex III, Exhibit A, gives some indication of the severity of the quantitative and qualitative housing deficit in these urban areas. Qualitatively, over 33 percent of the housing units on the coast and 12 percent in the Sierra are classified as substandard. The quantitative deficit in coastal cities like Chone and Portoviejo is equivalent to more than half of the existing housing stock. Some coastal cities must increase their existing housing stock by more than 50 percent simply to accommodate population growth by 1994.

Table 3 of Annex III, Exhibit A, reflects the need for a variety of public facilities in a selected group of secondary cities. These percentages would reflect a more severe situation if peripheral areas of the cities were included. Such areas, particularly invaded ones, usually have no services at all.

While information on market towns (urban areas with between 2,000 and 25,000 population) is less readily available, as a group they appear to be growing at a slower rate. Some, in fact, are characterized by an outmigration process as inhabitants seek out services available in secondary cities. Yet, many still serve as valuable linkages to their rural environs. Also, some are located near larger urban areas and are important for their satellite function. Thus, one can see a few towns having a large share of abandoned houses as well as towns with the same types of growth problems faced by secondary cities.

Accordingly, housing programs for such towns must be very selective, taking into account area specific trends and forecasts. One important factor that will have to be considered with respect to market towns is the GOE's national Integrated Rural Development and decentralization programs. The IRD program has identified some 17 rural areas throughout Ecuador slated for coordinated, multi-sectoral development efforts. A.I.D., IBRD, IDB, FAO, and IICA are all providing resources to assist with this effort. Undoubtedly, as the GOE proceeds with the implementation of its IRD program, added growth stimulus will be felt in some of the market towns. In addition, the GOE decentralization program (as further described later in this Project Paper) is also having an important effort in urban areas outside of Quito and Guayaquil.

Nevertheless, based on current trends the urban population will increase to 60 percent of the country's total by the year 2000. Nearly 10 million people will live in urban areas, half in urban areas other than Quito and Guayaquil. By 1984 the estimated housing deficit will reach over 600,000 dwellings in urban areas alone. Of this total, roughly 54 percent (or 324,000 units) is estimated to be derived from demand in urban areas outside Quito and Guayaquil. Housing institutions will have to vastly increase their investment in housing outside Quito and Guayaquil in the next few years simply to keep the deficit from increasing due to new family formation.

C. Major Constraints

There are a number of constraints which are preventing the country from more effectively addressing its low income housing and urban poverty problems in secondary cities and smaller towns. These constraints are described below.

1. Lack of GOE Financial Resources: Ecuador is facing a deteriorating economic situation which is forcing the GOE to reduce or eliminate many of its most important development initiatives. Economic growth rates have fallen from an average of nine percent per year in the 1970s to 4.2 percent in 1981. A recent IBRD study concludes that "the rate of growth that the country could achieve from 1981 to 1985 probably cannot exceed four percent per year" and some local economists even see the annual growth rate in 1982-84 declining to below three percent. With population growing at 3.4 percent per year, real per capita income increases will virtually cease.

Already, major budget deficits are appearing in central government and autonomous agencies which are forcing reductions in key development programs. It is estimated that less than half of the GOE's investment program included in the 1980-84 National Development Plan can in fact be initiated because of a lack of resources. Ecuador's balance of payments deficit in 1981 was $294 million compared to a surplus of $226 million in 1980. The country's declining exports and growing balance of payment problems led to a major devaluation of the Ecuadorean currency in May, 1982 which highlights the country's growing economic difficulties and declining standard of living for large segments of the population.

The deterioration of the Ecuadorean economy is attributed to several key factors: (1) the end of the country's "mini-oil boom" of the 1970s brought about by the declining exportable petroleum surplus exacerbated by the worldwide oil glut; (ii) stagnating agricultural exports of Ecuador's traditional products (bananas, coffee, cacao); and (iii) depressed international prices of practically all of Ecuador's export commodities. Recent IBRD and USAID macro-economic studies indicate that the outlook for the Ecuadorean economy in the 1980s is not good. This problem will seriously dilute and reduce the GOE's financial capacity to implement its new low income housing policies, particularly in secondary cities and smaller towns.

2. Institutional and Financial Weaknesses: In the past, there has been inadequate institutional capacity to deal effectively with low income housing and urban development problems on a national scale. Until recently almost all Ecuadorean public and private sector housing institutions have concentrated on middle and upper middle class housing which has prevented these institutions from developing their institutional, technical, and financial capacity for servicing lower income groups. There has been little experience in undertaking low income housing anywhere in the country but particularly in secondary cities and smaller towns. JNV/BEV have been highly centralized in Quito and Guayaquil with only limited organizational capacity for serving other urban areas of the country. Until recently there has been little attempt by JNV/BEV to expand the housing sector's absorptive capacity by developing Regional Offices and by mobilizing resources from municipalities and local private sector developers such as cooperatives, builders, and PVOs.

Likewise, improved coordination of national and local efforts in the housing and urban development sector is just beginning to emerge. In the past, many JNV/BEV housing projects have been undertaken outside of an urban planning process with little or no concern for providing complementary physical and social infrastructure and community services. While Ecuadorean municipalities are institutionally and financially very weak, they often have some resources (e.g., land, infrastructure financing) that can facilitate and complement national housing programs. Similarly, there are other local organizations (e.g., housing cooperatives, builders, PVOs, regional development agencies) that can provide some -- but not all -- of the inputs for low income housing projects. What has been necessary is a program that encourages national level agencies like JNV/BEV to mobilize local resources in a coordinated effort to expand low income housing throughout Ecuador.

There has also been a scarcity of mortgage financing for housing development in most secondary cities and smaller towns, particularly of the type that could stimulate the development of low income housing projects. An overwhelming amount of financing for the housing sector is concentrated in Quito and Guayaquil. In addition, the income distribution and urban poverty patterns in secondary cities have traditionally excluded almost all low income urban families from access to mortgage financing from the formal housing sector.

Finally, there are potential financial problems developing in BEV that could limit BEV's future capacity to expand financing for low income housing in the 1980s. Buoyed by GOE transfers generated from oil revenues in the 1970s, BEV had little incentive to charge realistic interest rates on its mortgage loans or to do serious financial management planning. A large component of its portfolio is now composed of low interest bearing loans. Unless BEV can quickly increase its lending volume at the newly approved higher interest levels, its financial situation will deteriorate.

3. Technological Limitations: Until recently, there has been little innovation within Ecuadorean housing and urban development institutions on new approaches to dealing with low income housing. Considerable resistance to housing technologies such as core solutions, piso-techo, and sites and services existed among former housing authorities. Municipalities also have resisted the lowering of infrastrcutrure standards that could better facilitate the implementation of lower income housing programs. While there is growing interest in the use of local building materials (e.g., adobe, bamboo, wood) to reduce housing costs, some reluctance to finance housing solutions that involve these materials still remains. There has also been only limited research on more efficient building materials, designs, and methods appropriate for Ecuador.

In addition, until 1980, no planning process existed which permitted absorption into project design of the dynamics of shelter acquisition and construction by low income families themselves (i.e., progressive housing solutions). There was little attempt to encourage participation by these families in the provision of their own housing through self-help construction methods. Likewise, the lack of institutions capable of providing technical assistance and training to low income families to make better use of public and private resources available to them has been a serious impediment in addressing low income housing and urban poverty problems.

4. Policy Implementation: Ecuador's new democratic government assumed office in August 1979 with a strong commitment to reverse policies and programs that neglected the needs of low income families. A five year National Development Plan was approved in 1980 along with new housing sector policies and programs. These new policies clearly recognize that JNV/BEV will be building and financing housing for low income families. There is a strong commitment to progressively developed housing solutions, particularly sites and services, and to minimum infrastructure standards. There is a recognition that lower income groups need to be provided with shelter solutions that they can afford (up to 25 percent of their monthly income) without a government subsidy for housing construction and infrastructure.

GOE policies also call for implementation of integrated urban development programs that can better attack the problems of low income urban families. Greater coordination between JNV/BEV and municipalities is emerging. There is growing recognition that JNV/BEV must work with municipalities and other local developers if Ecuador is to better address its growing housing deficit. The National Development Plan proposes a major decentralization effort directed to improving the quality of life in secondary cities and smaller town. Current plans call for 50 percent of all new housing investment to be located outside of Quito and Guayaquil.

A major effort has begun to upgrade JNV/BEV so that they can respond to the GOE's low income housing mandate. A JNV decentralization program is being implemented so JNV/BEV can better serve the needs of secondary cities and smaller towns. BEV interest rates have been increased from its sliding scale of four percent to 12 percent in 1976 to 15 percent in 1982. The JNV is interested in undertaking the country's first research program on lower cost housing materials and building systems.

Relative to the 1960s and 1970s, the new policies described above represent a virtual revolution in the Ecuadorean housing sector. Already, large scale programs have been initiated in Guayaquil and Quito that embody these policies and planning has been completed for extending these policies to secondary cities and smaller towns. In the views of USAID and RHO/PSA, JNV/BEV are headed in the right direction. With sufficient funding the above policies can be translated into effective implementation.

However, rapid change in any country often leaves some policy gaps and ambiguities. Ecuador's new housing policies and programs are still evolving and they will continue to evolve throughout the 1980s. For example, additional efforts are necessary to further reduce housing and infrastructure costs, to begin utilizing local building materials, to establish additional JNV Regional Offices and delegate to these offices greater project development and implementation responsibilities, to expand funding for low income housing in secondary cities and smaller towns, and to intensify efforts to mobilize local developers. While overall directions are positive, additional efforts are necessary to further reinforce and deepen GOE housing policy implementation so that the financial, institutional, and technological constraints may be overcome.

D. GOE Policies and Priorities

1. Past Performance

Throughout the 1960s and the 1970s there was little interest in Ecuador in providing progressive housing solutions that could be afforded by disadvantaged urban families below the national median income. In these decades, the Ecuadorean Housing Bank (BEV) and the savings and loan associations (mutualistas) limited their financing to relatively small scale middle and upper middle class housing projects. Other Ecuadorean agencies (the Social Security Institute--IESS, credit unions, housing cooperatives, and private banks) also largely concentrated on providing their mortgage financing to families well above the country's median income.

Following the establishment of JNV in 1973, several small low income housing projects were attempted. These projects were never considered a high priority by BEV or JNV, they were not replicated, and they provided an insignificant number of low income housing units. USAID even worked closely with BEV in the late 1960s and early 1970s to develop a large national low income housing program involving sites and services, piso-techo, and other progressively developed housing solutions that could be financed by an A.I.D. Housing Guaranty. However, this program was rejected by BEV's management because it failed to satisfy BEV's image of what housing solutions for Ecuadoreans and for BEV financing should be. A HG loan was never finalized.

While giving inadequate attention to low income housing, there was almost no concern for developing housing outside of Quito and Guayaquil. There was also little or no priority attached to developing working relations between BEV/JNV and municipal governments and mobilizing resources from local housing developers such as cooperatives and other private organizations. The few housing projects that were undertaken were often constructed outside of any urban planning framework, involved little or no coordination with local municipalities, and were not integrated with complementary physical and social infrastructure and services. There was little concern for lower cost construction systems and standards or for integrated urban development approaches that could better address the country's rapidly growing housing and urban poverty problems.

In some ways the military governments in power from 1971 to 1979 recognized the housing deficit problem but tended to approach it in a non-technical manner. In carrying out their policies they took several steps that they felt would benefit low income groups. One was to reduce BEV interest rates to four percent for low income families (setting a range from four percent to 12 percent based on family income and loan size). Another was to allocate several million dollars a year of petroleum revenues to BEV at zero cost. A third was to establish JNV as a significant housing production institution with cabinet rank. (The President of JNV is also the President of the Board of Directors of BEV.)

These production oriented measures were mixed with concepts of housing standards which to a considerable degree undermined efforts to truly reach the lower income strata of the urban population. Basically, JNV held to a standard $70m^2$ three bedroom house, whose price, even with low cost loans, could not be brought down to levels appropriate for the lowest half of the nation's families. There was little interest in experimenting with more appropriate lower cost approaches such as sites and services and core housing or in finding means of directing more housing finance into secondary cities and smaller towns. Thus, the two public housing institutions (BEV/JNV and IESS), as well as the savings and loan system, all evolved as housing producers for the middle and upper middle classes mainly concentrated in Quito and Guayaquil.

2. Current Housing and Urban Development Policies

With the publication in 1980 of the National Development Plan and its corresponding housing sector programs, there was a fundamental shift in Ecuadorean housing policy relative to the 1960s and the 1970s. Responsibility for implementing this policy is with the JNV. Over the past three years, JNV has been expanding its activities from project design and implementation to leadership in national policy, planning, and coordination that are included in

JNV's original charter. The financial aspects for implementing these new housing policies are the responsibility of BEV. Both these institutions worked closely with the National Development Council (CONADE) in formulating the Ecuadorean policy framework for housing and urban development summarized below:

- Target Group Focus - GOE housing programs should focus exclusive attention on the disadvantaged urban families below the national median income. JNV/BEV will concentrate on serving these lower income families. The IESS and savings and loan system will also attempt to serve lower income groups but will mainly fill the gap for middle and lower middle class housing. Income will be the factor on which unit costs and mortgages are based, with low income families paying no more than 25 percent of their incomes for monthly payments. More appropriate housing designs and infrastructure costs will be utilized to lower monthly payments.

- Appropriate Technology and Methods - The basic technology to be used by JNV/BEV will be progressive housing solutions that can be improved or expanded through self-help construction. Core housing, piso-techo, and sites and services will be constructed and financed on a large scale. Sites and services will be mainly used in coastal areas while core housing is used in the Sierra because of climatic conditions. Major efforts will be made to encourage municipalities to reduce their infrastructure requirements and standards in order to reduce housing costs. Likewise, greater use of local building materials will be encouraged. The private sector should be involved as much as possible in the housing sector. Local small industries, particularly for production of construction materials, will be assisted. GOE loans will be provided for such support.

- Integrated Approach - A coordinated system will be established for undertaking low income housing (integrating planning, financing, and implementation). Housing will be only one activity for dealing with the urban poverty problem. Whenever possible, low income housing projects will be implemented within an integrated urban planning context to ensure adequate provision of physical and social infrastructure, community services, training, and employment generating activities. JNV/BEV will implement housing projects in close coordination with municipalities and with other local development agencies such as housing cooperatives, builders, and PVOs. Community organizations will be encouraged to facilitate greater participation by low income families in the planning and implementation of housing projects.

- Financial - Larger scale capital flows will be encouraged to go toward low income housing (through elimination of capital gains taxes for the housing construction industry; creation of a secondary mortgage market; use of tax incentives; loans to BEV from the Central Bank, the Ecuadorean Development Bank (BEDE), and the Social Security Institute; and greater support for BEV from the Ministry of Finance).

- Full Cost Recovery - As part of BEV's new policy orientation, full cost recovery of the shelter solutions it provides has been instituted. The price structure that has now been established includes construction and construction financing costs, land and infrastructure cost, and inflation, administration other indirect costs.

- Geographic Distribution - A global housing investment program will be implemented by JNV/BEV in 1980-84 totaling the equivalent of $270 million and financing 54,630 low income housing units. At least 50 percent of these units will be located outside of Quito and Guayaquil. Housing will be a major instrument for attacking the urban poverty problem and improving the quality of life in secondary cities and smaller towns. This approach will form part of an overall strategy to direct more migration from rural areas and smaller towns away from Quito and Guayaquil and into secondary cities.

- Institutional Restructuring - To implement expanded low cost housing in secondary cities and smaller towns, JNV will expand the number of its regional offices. JNV headquarters will decentralize project development, implementation, and monitoring to JNV Regional Offices in secondary cities to increase JNV capacity to expand low income housing outside of Quito and Guayaquil. A major institution-strengthening effort will be implemented in JNV/BEV headquarters and an institution-building program will be initiated with JNV regional offices. The Regional Offices will be encouraged to develop low income housing projects that meet national priorities and guidelines. A major effort will be made to strengthen municipalities improve the urban planning process, and integrate housing into an overall urban and regional development strategy.

The urban development objectives of the GOE, outlined in its National Development and housing policies, recognize the permanence of Quito and Guayaquil as Ecuador's primary urban centers with their population expected to reach twice the levels of 1980 by the year 2000. However, GOE plans propose a series of policies designed to gradually slow down the increasing dominance of Quito and Guayaquil over other urban centers through greater development of secondary cities and smaller towns. As an IBRD report states:

> "Development of secondary cities deserves substantial attention and support ...... integrated development of both urban and rural areas in provinces away from the two major cities (Quito, Guayaquil) would contribute to diversified national economic development and to fostering production in the lagging agricultural sector."

GOE decentralization plans envision six alternative settlement (migration) areas and regional growth poles outside of Quito and Guayaquil with populations ranging from 500,000 to 1,000,000 million inhabitants by the year 2000. These areas are: Machala-Pasaje-Santa Rosa (up to 1,000,000);

Manta-Montecristi-Portoviejo (up to 1,000,000); Latacunga Ambato-Riobamba (up to 1,000,000); Cuenca-Azogues-Biblian (up to 600,000); Quevedo-El Empalme (up to 600,000); Esmeraldas-Tachina-Atacames-Sua (up to 500,000). The development of these areas is to be encouraged by the following actions:

- Rural Development - Greater rural development efforts are to be made that promote increased linkages between secondary cities and smaller towns and their surrounding areas of rural influence. Secondary cities and smaller towns will be improved as rural service centers whose growth is generated by increasing agricultural and rural development in surrounding areas of influence.

- Industrial Development - Through investment, tax, and other measures, a greater volume of industrial investment will be directed into secondary cities, particularly investments in appropriate processing and agroindustries that can stimulate greater agricultural and rural development. More small industries and other labor intensive activities will be promoted in secondary cities and smaller towns.

- Services and Infrastructure - Greater decentralization of commercial and government services will be made to regional centers and to other secondary cities, thereby expanding the number of employment opportunities outside of Quito and Guayaquil. The GOE will expand its investments in infrastructure, education, health, and housing in secondary cities and smaller towns. Also, the administration, planning, and services of municipalities will be upgraded in order that they become improved development agents.

While housing is recognized as only one instrument of the GOE's decentralization policy, it is given particular importance in GOE planning for the following reasons: First, large scale low income housing programs, particularly involving sites and services, are seen as a major instrument for attacking the growing social problems in Ecuador's secondary cities. Second, low income housing is a means of improving the quality of life, and combined with other investment, can contribute to the reduction in migration to Quito and Guayaquil. Third, low income housing is a critical element in implementing the GOE's integrated urban development strategy. Forth, projects involving housing, physical and social infrastructure, community services, training, and employment generation are seen as key instruments for dealing with the country's rapidly growing urban poverty problems nationwide. Finally, low income housing is one means of stabilizing a labor force in secondary cities that is required for the development of new industries and other productive activities being promoted through the GOE's decentralization program. For these reasons, GOE housing, urban development, and decentralization policies have been closely interrelated in all GOE planning documents.

3. GOE Progess to Date in Implementing its New Policies

With the return to a democratic government in August 1979, the GOE moved quickly to formulate and put into implementation the policies described above. Following publication in March 1980 of the National Development Plan, the GOE converted JNV and BEV into agencies that mainly construct/finance low income housing. The GOE also launched the largest low income housing program in the history of the country -- the construction of 10,000 units in various Guayaquil slum areas now known as "Plan Roldos".

In addition, in 1980 the GOE finalized Ecuador's first international loans for major low income housing and integrated urban development programs that embody the policy guidelines described in subsection 2 above. A $31 million IBRD loan for the Guayaquil slum areas was obtained to finance urban upgrading, sites and services, core housing, and home improvement and small business loans. At the same time, a low income shelter and integrated urban development program (Solanda) was developed for the slum areas of southern Quito and a $20 million A.I.D. Housing Guaranty and a $630,000 grant were approved to implement this program. (With over 5,000 units, Solanda is the largest low income housing program ever undertaken in Quito. See Project Paper 518-HG-005 for further details.)

Through the above described projects, improved working relations between JNV/BEV and the municipalities of Guayaquil and Quito are beginning to emerge. New integrated urban development models are being tested and local private sector agencies (e.g., Fundacion Mariana de Jesús in Quito, Banco del Pacifico in Guayaquil) are being mobilized to contribute to low income housing projects. New progressive shelter solutions and lower cost infrastructure standards are being introduced that are significantly reducing housing costs for low income groups. Greater target group participation in low income housing programs is being encouraged through self-help construction and community organization and a special fund for the social development of marginal urban areas (FODESUM) was established in the Ministry of Social Welfare in February 1981*. Planning has been initiated for extending the GOE's new housing policies into secondary cities and smaller towns and replicating the Guayaquil and Quito models nationwide. In this regard, the JNV has also initiated a decentralization program through which it expects to develop Regional Offices nationwide and delegate to these offices greater project development and implementation responsibilities for secondary cities and smaller towns.

Likewise, the GOE is making significant progress in initiating the non-housing elements of its decentralization policies. Greater GOE

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* FODESUM has allocated some S/600 million to community organization, potable water and sewerage infrastructure, training, and credit programs in urban poverty areas of Ecuador, mainly located in Guayaquil and Quito. The fund is maintained in the Central Bank and is largely based on petroleum revenues. Planning to guide expansion to the secondary cities is currently underway.

funding has been dedicated to agricultural and rural development and a new integrated rural development approach has been adopted that is focusing greater attention on rural-urban linkages. Expanded financing and technical assistance for small industries is being provided by the GOE's Industrial Development Bank (CFN), the National Development Bank (BNF), the Industrial Development Center (CENDES) and the Small Industry and Artesian Center (CENAPIA). A major portion of these resources is being directed to secondary cities and smaller towns including new financing for industrial parks and small industry and artisan demonstration projects. Also, a number of large agroindustry investments are being implemented or planned for secondary cities.

Perhaps one of the most important measures undertaken by the GOE to promote a more decentralized development process was the decision to establish BEDE, the Ecuadorean Development Bank. The decree creating BEDE was signed at the end of the previous government to consolidate funding mechanisms previously established during the 1970s (FONADE - the National Development Fund, and FODEM - the Municipal Development Fund). Under the current GOE administration, BEDE has become an important source of financing for municipalities, provinces, and regional development entities. Its clients are limited to public sector entities and its projects must be related to the economic development objectives of the country. BEDE's authorized capital is S/25,000 million ($757 million) of which almost half has been paid in since 1979 through earmarked revenues from petroleum exports. BEDE is seeking an IBRD loan for relending for such activities as potable water and sewerage systems, markets and slaughter houses, street paving, etc. As of March 31, 1982, BEDE had granted a total of 74 loans with a value of S/12,739 million ($380 million). Of this total, 28 loans with a value of S/1,599 million ($45.5 million) were granted to municipal governments of secondary cities and small towns for investment purposes.

4. Conclusions

It is clear that low income housing and decentralized urban development are a higher priority in the 1980s than in the 1960s and 1970s. The GOE understands the problems and constraints of the sector and has adopted policies and programs to address them. Large scale housing projects are being implemented in Guayaquil and Quito that embody these new GOE policies and the GOE desires to dedicate substantially greater resources to low income housing. Plans have been completed for extending the GOE's new low income housing policies and programs to secondary cities and smaller towns.

Financial mechanisms (FODESUM and BEDE) for complementary housing and urban development projects in secondary cities and small towns are now in place. Unfortunately, financial, institutional, and technological constraints could seriously limit the GOE's excellent progress in the housing sector. Clearly, there are substantial opportunities for A.I.D. through the HG program to assist the GOE overcome its financial constraint and, at the same time, improve its institutional and technological approches for expanding low income housing in Ecuador's secondary cities and smaller towns.

E. International Donor Activities

1. A.I.D.'s Historical Involvement

Throughout the 1960s and much of the 1970s, A.I.D. was the lead agency in the Ecuadorean housing sector. In 1961-62, A.I.D. technical assistance and a $5.0 million seed capital loan played the major role in establishing the Ecuadorean Housing Bank (BEV) and the country's savings and loan system. In the mid-1960s, A.I.D. financing of the 200-unit Chiriacu Project in southern Quito introduced self-help construction methods and attempted to pioneer a low income housing project that could then be replicated by BEV. However, BEV was not interested in this model and evolved largely as a middle-class housing agency directly competing with the savings and loan associations.

In 1968, a HG loan was authorized for BEV and a private Ecuadorean developer to finance the construction of 359 units located in the La Chala neighborhood of Guayaquil. The cost per unit was $3,900 and the HG drawdown was $1.4 million. The project was designed to show that a properly planned lower income housing project could stabilize the housing development occuring in the <u>suburbio</u>. A second HG project of $6 million, authorized in 1969, was instrumental in further strengthening the savings and loan system. Again, the BEV was the borrower, passing funds through to different savings and loan asssociations as subprojects were developed in the early 1970s. From these small initial A.I.D. investments, the BEV and the savings and loan system have grown into financially healthy institutions that offer an institutional base for better expanding lower income housing in the 1980s.

2. World Bank (IBRD)

Until its $31 million Guayaquil housing project in 1979-80, the IBRD urban sector participation had been confined to industrial credits and a 1974 loan to the Municipality of Guayaquil for water supply expansion. The Guayaquil housing project, currently being implemented after a year's delay in the signing of legal agreements, includes urban upgrading, serviced sites, core units, home improvement loans, and small business loans. The largest component of the project, serviced sites and urban upgrading, has suffered serious delays due to chronic administrative weaknesses of the Municipality of Guayaquil. The second major component, new housing and home improvement loans, is being administered by the JNV/BEV and is making relatively good progress. The third major component, small scale enterprise assistance, is now overcoming some of its difficulties with the private bank involved.

In May 1982, the IBRD approved a second major project in the urban sector -- a $35.7 million loan supporting housing investments in Quito and nine secondary cities. The project consists of: (a) new housing - 8,200 shelter solutions, including serviced lots and basic housing units; (b)urban upgrading - legal land tenure and basic infrastructure to some 2,400 households; (c) community facilities in the new housing and upgrading areas; (d) 7,000 home improvement loans; and (e) technical assistance. Of the three shelter types offered, only the serviced lots to be offered on the coast will be affordable by families earning below the national urban median income outside of Quito and Guayaquil, or approximately 40 percent of the total number of new units to be constructed.

Nearly $2 million of technical assistance will be financed from the IBRD loan for:

a. about 210 months of consulting services to help with implementation of the project, new project preparation including a second phase for Quito to reach lower income groups, and the improvement of the JNV/BEV's financial and technical management;

b. training of the JNV/BEV's staff; and

c. improving the BEV's information system by providing nearly $800,000 for an analysis of BEV's computer needs and for the acquisition and installation of a computer to meet these needs.

The A.I.D. project being proposed herein will be complementary to this new JNV/IBRD effort (See Issue No. 1 in the Summary and Recommendation section for a more detailed discussion of the relationship between the IBRD and A.I.D. low income housing projects.) The HG loan will finance housing solutions largely in urban areas other than those slated to receive IBRD assistance and generally for income groups lower than those which will be able to afford the IBRD financed units. Also, A.I.D. financed technical assistance is aimed at strengthening JNV Regional Offices while IBRD technical assistance in largely directed to JNV/BEV headquarters in Quito.

3. <u>Inter-American Development Bank (IDB)</u>

With the exception of a 1961 housing loan to BEV, IDB involvement in the sector has been limited to financing urban infrastructure such as potable water and sewerage systems. IDB has also provided substantial funding to the GOE's National Pre-Investment Fund (FONAPRE) for feasibility studies and urban planning, some of which has been directed to secondary cities.

However, most IDB urban infrastructure financing has been provided to Quito and Guayaquil, though more recently, secondary cities and smaller towns have benefited. FONAPRE urban planning and feasibility studies have been directed to secondary cities such as Esmeraldas, Milagro, Quevedo, and Babahoyo. The following summarizes IDB's activities in urban development:

a. three different projects (in 1974, 1977, and 1980) of loans and grants totaling $12.48 million to FONAPRE to finance the preparation of urban development plans, preinvestment surveys, feasibility studies, and staff training. Some of this is being directed to development and planning studies in secondary cites;

b. a 1978 loan of $12.2 million to the Municipality of Quito to finance the construction of the Pita-Tambo water supply system;

c. a 1977 loan of $17.0 million to the Municipality of Guayaquil to finance a sanitary and storm sewerage system in the Western Suburbs of Guayaquil; and

d. a 1977 loan of $12.2 million to IEOS (Ecuadorean Institute for Sanitary Works) for the construction of potable water supply systems in 12 communities in El Oro province.

In general, these activities have fulfilled certain important identified needs and important resource gaps in specific subsectors. These projects, however, have not been carried out in the context of long term institution building objectives nor low income group targeting. It is expected that IDB will continue to finance urban infrastructure projects in the 1980s, some of which may be undertaken in secondary cities.

4. Other Donors

The JNV/BEV are receiving technical assistance from several sources. Besides that provided by the IBRD (described above), the technical assistance currently available to the JNV/BEV includes the following:

a. The German government (through Gesellschaft fur Technische Zusammenarbeit) is providing the JNV with two experts for two years starting in July 1982. They will work directly with the Planning Department in project control, evaluation, and programming, particularly related to project financing. An additional ten staff months of short term assistance will be available for selected activities identified by the JNV and contractors. These efforts are being coordinated with the new IBRD loan.

b. From two Mexican Government organizations, the JNV/BEV are receiving short term assistance. The Secretaría de Asentamientos Humanos y Obras Públicas has agreed to provide occasional assistance directed specifically at the analysis and planning of urban development and housing projects in the Guayaquil suburbio of Guasmo. The Instituto del Fondo Nacional de la Vivienda para los Trabajadores will assist the BEV study the possibility of utilizing IESS (Social Security Institute) reserve funds to contribute to BEV financing.

c. The National Housing Bank of Brazil (BNH) will be providing three experts for short terms to assist BEV undertake a study of a nationwide compulsory savings program to support BEV financed housing.

d. The United Nations provided a technician for six months to assist the JNV establish its Division of Rural Housing. One or two additional staff months of assistance may be provided during the next year to study the technology of appropriate low cost construction materials and community development in rural areas. In addition, the United Nations has paid for JNV participation in international meetings at its agency on human settlement, Habitat.

e. The Organization of American States (OAS) has provided a housing and urban development expert for one year to the National Development Council (CONADE) and a second year directly with the JNV Planning Department.

f. The Government of France has provided funds for JNV participation in a course on housing design.

g. The Government of Italy will provide assistance through the National Vocational Training Service (SECAP) for skills training to residents of the JNV's Guayaquil housing project.

5. Conclusions

Only two international agencies are providing capital assistance for JNV/BEV housing programs -- A.I.D. and IBRD. Since 1980, A.I.D. and IBRD financing has been instrumental in supporting implementation of GOE low income housing projects, first in Guayaquil and Quito and now in secondary cities and smaller towns. IBRD and A.I.D. funding in the housing sector is complementary. In 1982 both agencies will further expand low income housing programs in secondary cities much as was done in 1980 when IBRD concentrated on low income housing programs in Guayaquil and A.I.D. concentrated in Quito.

A number of different multilateral and bilateral agencies are providing technical assistance and training resources to JNV/BEV. These resources are either directed at strengthening JNV/BEV headquarters or provide support to implementation of specific low income housing projects (e.g., IBRD). The A.I.D. grant of $630,000 provided with the Solanda HG also falls into this latter category. It is assisting JNV/BEV headquarters, the Muncipality of Quito, and the Ecuadorean PVO (The Mariana de Jesus Foundation) implement the Solanda Program and related studies. However, at the JNV Regional Office and local level, there is a significant and unfilled technical assistance training gap that is not now being addressed by any donor. The A.I.D. grant funds being proposed herein will fill this important gap as well as facilitate implementation of the Secondary Cities Low Income HG.

F. A.I.D. Strategy

1. Background

A new A.I.D. Program was initiated in Ecuador in FY 1980. It is designed to assist the country promote economic growth with equity by addressing some of Ecuador's highest priority development problems: widespread rural and urban poverty, lack of adequate housing, stagnating agricultural production, rapid population growth, growing environmental degradation, and the need to increase energy resources.

As indicated in USAID's approved CDSS, institutional, technological, and human resource constraints often limit Ecuador's ability to adequately address these problems. USAID's strategy is to strengthen

Ecuadorean institutional and technical capacity, develop more efficient delivery systems, and increase absorptive capacity so that the country can utilize an increasing volume of development resources and direct them to key problem areas.

In accordance with this strategy, USAID seeks to: (i) support changes in policies and resource allocation; (ii) build up and expand institutional capacity; (iii) develop and disseminate more appropriate lower cost technologies; and (iv) strengthen progressive elements of the public and private sectors so that they can better address the country's critical development problems.

Several priority areas for A.I.D. support have emerged and evolved within this framework, beginning with conversations with late President Roldos shortly after his election and supplemented by a continuing dialogue with key GOE officials, including President Hurtado both in his current role and in his former position as Vice President and head of CONADE. In these conversations, GOE officials have identified low income housing as a high priority area for A.I.D. assistance, particularly low income housing in secondary cities and smaller towns.

USAID's shelter strategy is outlined in its CDSS and began in FY 1980 with the approval of a $20 million HG and $630,000 grant for the Integrated Shelter and Urban Development (Solanda) Program (518-HG-005). In addition to supporting the GOE's low income housing policies, Solanda is designed to allow the JNV/BEV to test a new integrated urban development approach that involves participation by both the Municipality of Quito and a local private organization (the Mariana de Jesus Foundation) that are providing land and complementary physical and social infrastructure and community services. It is USAID's expectation that out of the Solanda experience will emerge a model (involving coordinated actions by JNV/BEV, a municipality, and a local private developer) that could be replicated in other urban areas, particularly in secondary cities.

The implementation of the Solanda program is somewhat behind schedule due to a labor dispute in the Mariana de Jesus Foundation, delays in donating the land for the program, GOE personnel changes, and the unusually high interest rates in U.S. capital markets in 1981-82. However, these problems have been resolved and implementation is underway. Paine Webber has been selected as the investor and the loan and guaranty agreements will be signed on July 19, 1982 with an initial drawdown of $6.0 million. Infrastructure works at the Solanda site have begun using JNV/BEV counterpart funds and construction of the first group of 1,852 houses should be completed by June 1983. The Mariana de Jesus Foundation has begun the selection process for Solanda beneficiaries, technical advisors have been contracted for the social program using A.I.D. grants funds, and final planning for social and community services and employment and training programs is being completed. Already, Solanda has provided JNV/BEV with a valuable learning experience that can now be used in developing other similar programs nationwide.

It is anticipated in the USAID's CDSS that the second phase of its shelter sector strategy would involve a HG loan to assist JNV/BEV further expand their low income housing programs into secondary cities and smaller towns. The project described herein constitutes the second phase in which the institutional development of a decentralized JNV is a key objective.

Initial planning for a third phase of USAID's shelter sector strategy has already begun. (See USAID's FY 1984 ABS for further details.) This third phase will focus on the provision of low income housing through private sector institutions such as savings and loan associations, credit unions and housing cooperatives. However, before such a project can be finalized, complex policy and project analyses must be completed and lengthy negotiations conducted with private sector housing institutions. Nevertheless, the USAID is confident that by FY 1984, a Private Sector Low Income Housing HG will be finalized that will expand further USAID's housing activities with the private sector.

In the 1980s, the housing challenge in Ecuador is to support JNV/BEV efforts to implement low income housing programs and to stimulate private sector institutions to direct more of their mortgage financing to lower income families. With carefully planned, directed, and managed A.I.D. resources, USAID and RHO/PSA believe that the 1980s can be as creative and as significant a period in Ecuador/A.I.D. programming as were the 1960s when A.I.D. successfully served as the catalyst for the establishment and operation of BEV and the Ecuadorean Savings and Loan System.

2. Project Strategy

The basic strategy proposed herein is to use a $25 million HG sector loan and a $300,000 grant to support the further implementation of the new housing policies of JNV/BEV in secondary cities and smaller towns. The construction of low income housing units and the implementation of specific projects, however, are the means of achieving institutional and technological development objectives as follows:

- JNV Decentralization - If the JNV is to meet the rapidly growing demand for low income housing outside of Quito and Guayaquil, JNV must continue its administrative decentralization program through further strengthening and expansion of its Regional Offices. In addition, greater delegation of project development and implementation responsibilities to JNV Regional Offices is needed. The HG sector program will serve as a catalyst to strengthen JNV Regional Offices and encourage their expansion. Under the program, JNV Regional Offices will have the primary responsibility for developing, implementing, and monitoring low income housing projects in secondary cities and smaller towns and presenting projects to JNV/BEV headquarters for final approvals.

  The institutional development of JNV Regional Offices will be encouraged through a process learning approach (or learning by doing). The HG sector program is being left flexible as to specific subprojects to be funded so as to encourage JNV Regional Offices to take a lead role in developing projects that meet national policies and priorities. The HG loan and technical assistance are designed to stimulate local level housing innovations and experimentation. Specific criteria will guide the types of subprojects that are eligible for HG funding. JNV/BEV headquarters will operate as an Intermediate Credit Institution (ICI) in receiving, reviewing, and approving specific low income housing subprojects proposed by the Regional Offices which will then either undertake and/or monitor subproject implementation.

- Institutional Coordination/Leadership - In developing specific projects JNV Regional Offices will be encouraged to mobilize complementary resources (e.g., land, infrastructure financing, social infrastructure, community services and organization) from municipalities and other local development agencies (e.g., housing cooperatives, PVOs, builders, regional development agencies) much as being done in Quito in the Solanda Project. The HG loan will promote linkages between JNV Regional Offices and local development groups who can work together with the JNV in implementing low income housing projects. The project is designed to stimulate JNV Regional Offices to play a leadership role in seeking out municipalities and local development agencies and to work together with them in developing and implementing low income housing subprojects.

  JNV Regional Offices can call upon JNV/BEV headquarters for HG financing for low income housing projects that meet Ecuador's diverse social, cultural, and geographic conditions. Other local level development agencies (e.g., municipalities, regional development agencies, community organizations) may also contribute resources. Finally, the Regional Offices can call upon BEDE, FODESUM, or GOE Ministries to finance complementary physical and social infrastructure and community services.

- Lower Cost Technologies - To date, JNV Regional Offices have not had a great deal of experience designing and supporting low income housing that involves progressive housing solutions based on local conditions. Nor have these offices utilized less expensive local building materials such as adobe and bamboo. The HG loan and technical assistance provided by the A.I.D. grant will encourage JNV Regional Offices to develop projects that include sites and services, piso-techo, core housing, and home improvement loans that begin to introduce local building materials. Again, the availability of the HG resources and A.I.D. technical assistance will encourage greater experimentation and innovation based on the specific conditions encountered by each JNV Regional Office. Through this project the lower cost technological approach of progressive housing solutions will be widely disseminated throughout Ecuador.

- Improved BEV Financial Situation - The Ministry of Finance will be the borrower under the HG loan. BEV will receive the resources in local currency at 12 percent and relend at 15 percent. This margin will permit BEV to assume the higher cost inherent in administering a larger number of smaller unit value loans resulting from having a greater share of its portfolio in low income housing. At the same time, BEV's financial admistrative capacity will be increased by the IBRD financed technical assistance and computers. Thus, by the end of the project, the improvement in BEV's overall financial structure will permit it to continue serving the low income target group while maintaining its financial soundness.

The GOE policies to support these objectives are in place and are being put into practice. These new policies will bring about important benefits for the GOE's housing sector institutions. For example, the adoption of a full cost recovery policy and the recent increase in interest rates for home loans will help strengthen BEV financially. The strategy of the project is to widen and deepen policy implementation to bring about the achievement of the institutional and technology objectives described above. In this process, USAID will work closely with the IBRD so that joint positions on policy implementation matters may be developed. In this regard, the IBRD has requested that BEV prepare a detailed study of its interest rate structure during the first year of IBRD project implementation. USAID will coordinate with IBRD on this study as well as on other matters to promote the continuation of a constructive dialogue with GOE housing sector authorities on such key issues. Thus, the project will provide a vehicle to seek the adoption of practices and procedures necessary for meeting the jointly agreed upon sector objectives.

III. PROJECT DESCRIPTION

A. Reasons for Selecting the Sector Loan Technique

As indicated in Section II, the current Ecuadorean government has established a new low income housing policy framework that embodies the approaches recommended by various international agencies. A national low income housing program and financial plan have been formulated for 1980-84 that envision the construction of nearly 55,000 housing units with special emphasis directed to secondary cities and smaller towns. The JNV/BEV implementing mechanism is in place to carry out these policies and programs through the financing of low income housing subprojects. A large universe of potential subprojects exists for which funding is not currently available. The GOE's national and sector planning process has led to the development of specific subproject selection criteria which flow from GOE policies. However, a significant resource constraint is limiting the JNV/BEV's ability to carry out its new policies. Without financial resources it is unlikely that JNV/BEV will be able to overcome their institutional and technological constraints and meet the country's rapidly growing need for low income housing.

USAID and RHO/PSA are especially interested in assisting GOE policy implementation and institutional and technological development. While GOE housing policies will continue to evolve in the 1980s, both IBRD and USAID--RHO/PSA believe that the JNV/BEV are headed in the right direction. What is needed is flexible funding and technical assistance to further expand and deepen policy implementation while facilitating greater institutional and technological development. The sector lending technique has been developed to facilitate these objectives. The sector loan is under constant attention, allowing refinement of the assistance and strategy as sector problems arise. It addresses directly the crucial sector issues and seeks to support expanded policy implementation through the provision of financial and technical assistance.

In these circumstances, the sector lending technique is particularly appropriate because the GOE's low income housing program involves the financing of a large number of different subprojects throughout the country. Individual subprojects could vary from 500 solutions of sites and services and piso-techo on the coast to 100 units of core housing in the Sierra to a home improvement and slum upgrading activity. To stimulate institutional growth and technological development, subprojects will be implemented in all three of Ecuador's geographic areas (Coast, Sierra, Oriente) and will be carried out in diverse social and cultural settings.

Consistent with the sector loan approach, the implementation of specific subprojects will not be the project's primary focus; they will be simply the means of facilitating policy implementation and institutional and technological development objectives. Nevertheless, all subprojects are unified by a central GOE policy theme -- i.e., increasing the availability of affordable shelter for low income families in secondary cities and smaller towns. Therefore, unlike a project loan which covers only a limited geographic area and specific sites, is mainly concerned with the end-use of loan funds (i.e., the production of a specified number of housing solutions), and is relatively rigid in its application once negotiated, the sector loan permits a flexible approach that focuses on broad objectives. While subprojects will meet agreed upon criteria and will be reviewed against A.I.D. standards, the main emphasis of project implementation will be on the continuation of USAID's and RHO/PSA's productive dialogue with the JNV/BEV on how to further strengthen the GOE's response capacity for low income housing needs. The specific bases justifying the use of a sector loan technique for the project proposed herein are summarized below.

1. Policy and Program Framework

As fully described in Section II.D, the GOE's basic policy frame work for an expanded, viable low income housing program is in place. The new policy framework represents a significant move away from past subsidization practices. It also embraces the progressive and self-help approach to new solutions and recognizes the importance of upgrading programs. Technical standards are being reduced to make it possible for the first time in Ecuador's history for the public housing sector institutions to provide a meaningful response to the low income segment of the population.

At the same time, the GOE is cognizant of the need to make institutional adjustments if it is to have a program to carry out these policies. The recent budget separation between JNV and BEV will allow each to develop better along their own specializations. Time dedicated by JNV in the past on direct administration of construction will be redirected more towards overall program planning and management. JNV will work more through and with other entities such as local municipalities and private sector developers.

More importantly, JNV is committed to a course of decentralization. Greater responsibility will be placed at the level of its Regional Offices to identify the problems and develop appropriate solutions. As these offices gain experience and self-confidence through carrying out this proposed project, JNV's absorbtive capacity for designing and implementing low income housing solutions will increase tremendously. The policy framework now embraced by JNV/BEV has been encouraged and recommended by A.I.D. and IBRD for some time. It is only appropriate that a significant response be made in order to help cement these policies through accelerated program implementation.

2. Financial Gap

Increased external assistance will be required by the BEV if it is to make a significant reduction in the national housing deficit in the 1980s. The National Study of Housing Supply and Demand for 1980-1984 estimates that 168,835 new dwellings are needed over the five-year period merely to accomodate new household formation. Over 430,000 more are needed to replace substandard units and relieve overcrowding. However, at current budgetary levels, BEV is barely able to meet its assigned portion of new housing demand without affecting the larger accumulated deficit.

The Demand Study determined that BEV should finance 41 percent of the projected new housing demand from 1980 to 1984, or 68,760 units. This objective alone would require an average annual investment of S/2,648 million. BEV's 1982 budget provides slightly less than the average, S/2,234 million, for housing investments through the JNV. A summary of BEV budget is shown below.

BEV 1982 BUDGET
(millions of sucres)

Income		Expenditures	
Portfolio income	800	Operations	597
GOE contributions	496	Land acquisition	100
Bonds	500	Interest and amortization	1,141
Savings deposits (net increase)	700	Investments	
Long-term loans		-office construction	60
-domestic	1,045	-JNV housing	2,234
-external	245	-other projects	32
Other income	454	Other expenditures	76
TOTAL INCOME	4,240	TOTAL EXPENDITURES	4,240

If BEV is to go beyond simply meeting new demand and begin addressing the existing housing deficit, it must generate increased income from one or more of its funding sources. As can be seen from the budget summary, BEV relies primarily on domestic sources of funding including portfolio earnings, GOE budget allocations, savings deposits, bond issues, and loans. The prospects for significant increases in these domestic sources in the near term are mixed.

As pointed out in the financial analysis, portfolio income and operating profit should increase as a result of BEV's decision in March 1981 to raise the interest charged on loans from the 4-12 percent range to 15 percent.

On the other hand, GOE budgetary allocations to BEV are not likely to increase significantly in the foreseeable future. BEV, like other public institutions, will be affected by the austerity measures recently announced by the GOE. These measures are an attempt to reduce the fiscal deficit which grew from S/5.7 billion in 1980 to S/11.3 billion in 1981, primarily as a result of overly optimistic projections of oil revenues.

BEV took a major step toward improving savings mobilization by increasing the interest it pays on deposits to competitive rates (13 percent on passbook accounts, 14 percent on time deposits). This policy change, backed by BEV's network of four branch offices and 14 agencies, should help increase savings deposits.

BEV also raises domestic funds through the sale of bonds which all private banks as well as insurance companies and some public agencies are required by law to buy*. In the past, BEV did not take full advantage of this opportunity. Bond issues are now being increased to ensure full participation and to provide added resources for BEV investment. However, proceeds from bond sales are in large part limited to the growth in private savings which could be adversely affected by current economic conditions.

Finally, BEV has recently contracted a number of loans from the Ecuadorean Social Security Institute (IESS) and the Ecuadorean Development Bank (BEDE). However, these institutions face demands to finance a variety of urban and regional development projects outside of JNV/BEV. In a period of economic stagnation and GOE austerity, they will have to allocate their limited resources carefully among these competing demands. Therefore, the ability of BEV to secure increased loan funds from these domestic sources is highly questionable.

In summary, despite the efforts of BEV to augment its resources through major interest rate reforms and increased bond sales, economic conditions in Ecuador would appear to prohibit significant increases in domestic funding for BEV's programs. Current levels of external assistance, which constitute the smallest source of BEV's funding, are barely sufficient to allow BEV to do its share in meeting new housing needs. Increased external assistance is indispensible if the GOE is to begin to make serious inroads against the existing housing deficit.

3. Implementation Mechanism

The GOE has a proven housing sector implementation mechanism with a clear division of responsibilities between BEV and JNV. Financial aspects involving the processing of individual mortgage loans and home improvement credits will be managed by BEV through its 18 field offices. The JNV will serve as overall project administrator. It will make policy/procedural

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* The bonds are intended to fulfill a social function while imposing a type of reserve requirement on the private banking system. The bonds carry a seven percent interest rate. The law stipulates that national banks must buy an amount equivalent to ten percent of net savings deposits. Foreign-owned banks must invest funds equal to ten percent of total deposits.

decisions as necessary and will monitor and evaluate project progress. The JNV's Regional Offices will play an instrumental role in the design, promotion, and development of individual subprojects.

For each new construction activity, the corresponding JNV Regional Office will work with a local municipality and/or regional development entity. These organizations are potential sources of low cost land, as well as services such as water and electricity. In most instances, municipal governments will have to agree to the lower construction and urbanization standards contemplated under the subproject. They will also be called on to provide maintenance services for subproject infrastructure.

The JNV Regional Office will be expected to help the municipality mobilize assistance from BEDE, FODESUM, IEOS, and other centralized sources of financial support that may be needed for related physical infrastructure. If appropriate, the Regional Office will help mobilize local community organizations including cooperatives or credit unions. These groups will assist the self-help construction activities, supply building materials, and in some cases participate in the financial administration. (Complementary resources from USAID's SDA and OPG funds will be accessible to further such community efforts.) The JNV Regional Offices will also coordinate with the Ministry of Education and the Ministry of Public Health as necessary to promote the construction and operation of schools and health facilities. Finally, the Regional Offices will attempt to identify opportunities to expand its capacity by working through private developers who will promote and construct individual subprojects.

The institutional structure for a decentralized low income housing program is in place. Staffing requirements are largely filled. Inservice training programs have been carried out and more are planned. There is a clear institutional mandate to carry out the objectives of the National Development Plan. Thus, the project will improve the existing implementation mechanism, rather than set out to create a new one.

4. <u>Criteria for Subproject Selection</u>

a. <u>Geographic Criteria</u>

This HG loan will strengthen the GOE decentralization policy and give priority to projects located in the National Development Plan's alternative settlement areas and regional growth poles outside of Quito and Guayaquil (See map, Annex III, Exhibit B). These growth poles and their estimated population by the year 2000 are:

1. Manta-Montecristi-Portoviejo (up to 1,000,000)
2. Machala-Pasaje-Santa Rosa (up to 1,000,000)
3. Latacunga-Ambato-Riobamba (up to 1,000,000)
4. Cuenca-Azoques-Biblian (up to 600,000)
5. Quevedo-El Empalme (up to 600,000)
6. Esmeraldas-Tachina-Atacames-SUA (up to 500,000)

HG loan financed subprojects may be implemented in urban areas within any of these growth poles. Secondary cities and towns outside these growth poles may be considered for HG loan financing on a case by case basis. In particular, rapidly growing urban areas outside of Guayaquil in Guayas Province are important alternative settlement locations. Demand for improved services in these areas is high. In the event that a subproject is proposed for the same secondary city in which the IBRD project is active, JNV will obtain USAID approval before proceeding with subproject development. JNV's requests will be supported by a technical justification demonstrating how different demand strata will be served by the proposed A.I.D. investment.

Market towns within GOE designated Integrated Rural Development (IRD) project areas will also meet geographic eligibility criteria for HG loan financing. There are 17 IRD project areas identified in the National Development Plan of which 11 are currently under implementation and the balance under study. The program accounts for a major share of the GOE's rural development activities. External funding from IBRD and IDB as well as A.I.D. is supporting the overall IRD program. Access to the HG loan for low income housing in IRD project market towns will serve as a complementary resource to these rural development efforts.

Selecting specific subproject sites for HG loan financing will take into account factors such as actual and anticipated population growth, employment potential due to industrial development or other investments creating employment opportunities, overall shelter conditions, and concentrations of low income families. The HG loan will permit the flexibility to carry out subprojects outside the six growth poles and the IRD market towns, provided JNV presents specific justifications citing one or more of these factors. In this regard, the JNV has indicated that priority areas for A.I.D. financed subprojects would emphasize urban areas covered by the JNV Regional Offices in Cuenca and Portoviejo which include for Cuenca: Cuenca, Azogues, El Tambo, Biblian, and Macas, and for Portoviejo: Portoviejo, Manta, Chone, Jipijapa, Montecristi, El Carmen, and Bahia de Caraquez. Both of these areas are designated growth poles and are not receiving any IBRD funding.

The JNV will be required to present a certification with each subproject presented for USAID approval for HG financing that states:

o The subproject site is within one of the National Development Plan's six regional growth poles outside of Quito and Guayaquil, or in a market town within one of the GOE's Integreted Rural Development projects, or has been previously approved by USAID in writing.

b. <u>Technical Criteria</u>

The technical criteria will assure that the socio-economic data analyzed in the <u>National Demand Study</u> to identify target groups is translated into a range of shelter solutions, or a dwelling typology, that is affordable to low income families earning below the median income. This means that all shelter solutions would have a maximum cost that will be affordable to families earning incomes below S/4,300 ($130), the estimated median urban income outside of Quito and Guayaquil in 1981.

Maximum loan amounts are based on 25 percent of family income available for housing, 15 percent interest rates, up to 25 year loan terms, and up to 20 percent downpayment as indicated in the JNV's Shelter Reerence Plan. The distribution and the number of each type of solution to be built will depend on the income distribution profile of the different subproject areas.

The subprojects will be characterized by their progressive development strategy, smaller lot sizes, reserved areas for community facilities, reliance on self-help participation, and support for regional diversity in terms of building materials. New construction subprojects will offer a variety of levels for infrastructure and constructed area. The simplest solution is a lot with basic infrastructure of water, sewerage, and electricity (sites and services). The next type of solution includes the serviced lot and a minimal unenclosed core unit (piso-techo) or a minimal enclosed core unit. Piso-techo units will not be built in the Sierra but instead enclosed minimal core units. Piso-techo units will be offered only on the coast where the climate permits.

The JNV will be required to present a certification with each subproject presented for USAID approval for HG financing that states:

- o The proposed subproject complies with JNV methods and design standards that include considerations of environmental impact, land use, site design, construction materials, and dwelling unit design. Site design and land use will be reviewed against indicators of layout efficiency that show (i) 60 percent of site area is salable land for housing, (ii) 25 percent f site area is utilized as pedestrian and vehicle circulation; and (iii) 15 percent of site area is utilized for community facilities and green areas.

c. Operational Criteria

As indicated earlier, a project objective is to increase JNV's capacity to work with and through other collaborating institutions, especially at the field level. Each subproject proposal will be reviewed with respect to its contribution to this operational strategy. Moreover, at least 30 percent of the total HG funds for subprojects will be earmarked for subprojects in which the JNV is involving cooperative, community associations, and other collaborating developers. The JNV will be required to present a certification with each subproject presented for USAID approval for HG financing that states:

- o The proposed subproject fulfills the JNV requirements for subproject implementation which include (i) the availability of land; (ii) access to the provision of water, waste disposal, and electricity through the proximity of off-site infrastructure or other means; (iii) identification of a developer capable of implementing the subproject; (iv) JNV Regional Office staffed and trained to adequately manage subproject development; and (v) the availability of construction materials and labor with and by which the proposed subproject would be built.

Each subproject certification will also include: (a) a plan to locate the project in its respective city; (b) a site plan that would show circulation, infrastructure, and lot layouts; and (c) plans of the proposed solutions to be built.

The operating criteria will be fundamental to the implementation of the home and infrastructure improvement component of the HG loan. JNV's experience in operating such programs is largely limited to the Guayaquil home improvement and community upgrading program financed by the IBRD. As a condition precendent to disbursement for home and infrastructure improvement activities, the JNV will have to present a detailed plan for training the staff of its Regional Offices. The Guayaquil IBRD experience will offer a useful basis for such a plan. Moreover, the advisor recently contracted for the USAID Housing Office has ample experience in this aspect and will assist JNV in the development of the training plan.

5. Low Income Housing Subprojects

The JNV has identified potential housing subprojects for its 1982-84 program that total \$315.6 million in investment needs. Of this amount, \$156 million is required for its planned housing activities in urban areas other than Quito and Guayaquil. For purposes of identifying potential subprojects for financing under the HG loan, USAID also excluded any investment programmed for the secondary cities to be assisted under the new IBRD project. USAID then conservatively estimated that only about 60 percent of the JNV's identified list of subprojects for the 1982-84 period in the remain- ing urban areas would fall within A.I.D.'s income eligibility range. This resulted in some \$40 million worth of investment requirements for the HG project.

The table on the next page illustrates the nature of the distribution of this \$40 million of subproject potential by geographic distribution and type of solution. Additionally, USAID and RHO/PSA have prepared a narrative description of typical subprojects to be financed under the HG loan. This illustrative subproject description is contained in Annex III, Exhibit C. In summary, there is an ample magnitude of already identified subprojects outside of the cities to be assisted by the IBRD project to rapidly absorb the HG loan.

B. Project Goal and Purpose

The goal of the project is to improve the quality of life for low income and disadvantaged families in secondary cities and smaller towns whose monthly income is below the national median. These families constitute a majority of the population in all of Ecuador's urban areas outside of Quito and Guayaquil.

Table III-1

SUMMARY DISTRIBTUION OF JNV 1982-84 PLANNED LOW INCOME HOUSING PROGRAM 1/

Type of Solution	1982-83 Number of Units	1982-83 Unit Cost	1982-83 Total Cost	1984 Number of Units	1984 Unit Cost	1984 Total Cost	Total Number of Units	Total Costs
Sites and Services	2,700	1,600	4,320	2,000	1,900	3,800	4,700	8,120
Core Houses (Sierra)	1,500	3,800	5,700	1,000	4,200	4,200	2,500	9,000
Piso-Techo (Coast)	2,300	3,400	7,820	2,000	3,800	7,600	4,300	15,420
Home Improvements	2,600	--	4,000	2,600	--	2,670	5,200	6,670
Totals	9,100		21,450	7,600		17,970	16,700	40,110

1/ Excludes cities in which the new IBRD project will be operating.

The project purpose is to assist the GOE implement its housing policy objectives of: (i) directing greater resources to low income housing needs in secondary cities and smaller towns; (ii) making JNV's institutional infrastructure more responsive to local needs by strengthening and expanding JNV Regional Offices and decentralizing housing program administration; and (iii) increasing the number of beneficiaries by implementing lower cost construction technologies and mobilizing local resources from municipalities and private sector developers.

C. Project Outputs

1. Housing Solutions

The selection criteria presented above are tools by which the JNV/BEV and USAID will guide investment towards specific types of subprojects. The selection criteria will require that the type and location of the subprojects to be built fulfill the objectives JNV has set for itself institutionally. The subprojects will demonstrate their support of the National Development Plan's six regional growth poles and priority secondary cities and smaller urban areas. The selection criteria will also serve as a target group control device. It will require that the shelter typology reflect GOE policy to attend to low income families' shelter needs through a variety of options for new construction and home improvements.

The selection criteria will promote the technical objectives of the GOE and JNV. Final subproject descriptions presented to USAID for its approval will provide information by which JNV and USAID can be assured the subproject under consideration is an efficient, cost effective one that demonstrates the JNV objectives to use improved regional materials and appropriate mass produced building components. (See Technical Analysis of IV.A.) The subproject description will also show that all the requisite elements are in place such as land at reasonable cost, access to basic services, a developer, and the institutional capacity at the Regional Office level to manage subproject development.

The project will finance approximately 14,600 loans for various low income housing solutions. Some 9,400 of the loans, accounting for 80 percent of total HG and GOE funding, will be for new sites and structures (sanitary cores, piso-techo, or enclosed core units). Approximately 5,200 loans will finance home and neighborhood improvements. Since in some cases recipients of loans for new, progressive construction may also receive improvement loans, the total number of families benefited will be slightly less than the total number of loans. Accordingly, the number of families to be served by the project is conservatively estimated at 13,000.

Starting with the basic designs developed by JNV and discussed in the Technical Analysis Section, the project will support additional solutions to reach further down the income scale such as semi-urbanized and urbanized lots with options to include sanitary or basic core units of either conventional or traditional building materials. Home and neighborhood improvements will follow the priority list established by the JNV that follows a logical criteria of tenure, health condition, adequate space, and quality of materials and finishes. Typical improvements include the provision of and/or the connection to basic infrastructure and infrastructure related improvements such as sanitary cores and kitchen space, room additions and building materials replacement, repairs for roofs, and laying floors of wood, fired clay tile, or cement.

Loans to beneficiaries for new shelter solutions will have a term of up to 25 years, and carry an interest rate of 15 percent per annum. Loans to beneficiaries for home and neighborhood improvements will have terms of up to ten years and interest rates of 15 percent per annum. The average cost of a new solution will be S/95,000 and the average home and neighborhood improvement loan will be S/40,000. Loans for new construction and improvement loans of over S/30,000 will be collateralized by a first mortgage. Smaller home improvement loans may be collateralized by other assets or merely guaranteed by co-signers acceptable to the BEV.

2. Institutional Development

a. JNV

The A.I.D. HG loan and the corresponding development grant will support the current JNV methodology for identifying need, programming response, and informing its Regional Offices through Annual Plans of Operations of recommended programming types and levels. The JNV methodology has begun to rationalize the activities of the JNV/BEV Central and Regional Offices and agencies. Policy formation, sector analysis, programming, evaluation, and technical support responsibilities will be carried out by the Central Office. Ever increasing responsibilities for site acquisition, project identification, design and development, beneficiary organization and selection, inspection, and payment collection is being delegated to the Regional Offices in support of the annual programs provided by the JNV/BEV Central Office.

By the end of the project, JNV will have increased the number of its Regional Offices from four to six. These six (Quito, Guayaquil, Cuenca, Portoviejo, Riobamba, and Loja) will provide national coverage of Ecuador's secondary cities and market towns. Each will have an adequate staff trained in the various disciplines necessary to carry out the variety of tasks associated with each subproject.

Each office will have gained practical know-how in working with and through other public and private sector entities. Hands-on experience with more appropriate low cost design and technologies based on local materials will have been imparted to each Regional Office in which an A.I.D. HG loan financed subproject is implemented.

b. BEV

The proposed program will result in the adoption and institutionalization of more flexible lending criteria by the BEV and the development of the mechanisms required to apply these criteria to shelter program loans. BEV will gain further experience in directing its lending activities at a new client group characterized by low and not always regular incomes. This clientele precludes the use of payroll deductions, for example, requiring the BEV to redesign its collection process. Experience in this regard is limited though growing as a result of the IBRD program in Guayaquil. Experience elsewhere in the developing world makes clear that overall delinquency rates will not be inconsistent with formal sector experience. (The BEV now has an adequate three percent delinquency rate.)

The objective is to adjust the collection process so as to reflect the financial capability of the target group, and to design the collection mechanism that makes repayments easy. This can be accomplished through alignment of the amortization schedule to income flows, and perhaps more importantly, by making the collection points accessible. Short term consulting services can be financed under the Solanda Grant component to assist BEV develop such mechanisms. In response to JNV/BEV policy to identify and use surrogate collection agencies, the participation of municipal offices, community organizations and cooperatives will greatly facilitate collections and help keep administrative costs down.

The manner in which the A.I.D. HG resources are to be made available to BEV will improve its financial situation substantially. First, the GOE's Ministry of Finance will serve as borrower and assume all exchange risk. Second, the resources will be made available to BEV in local currency at 12 percent for relending at 15 percent. Third, the long [illegible] period, ten years, and repayment period, possibly up to 30 years, will provide BEV the opportunity to roll over a portion of these resources, thereby improving its earnings situation. At the same time, BEV's overall financial management will be improved through the financial management technical assistance and computarization program financed by the IBRD loan.

D. Project Inputs

An A.I.D. Housing Guaranty loan of $25 million is proposed as the principal input to the project. The HG Loan will account for 75 percent of the long-term financing for home mortgages. BEV will finance the remaining 25 percent of the loans to homeowners which will amount to $8.34 million. Additionally, homeowners will provide $5.33 million in downpayments towards the purchase price. Homeowners will also provide an in-kind contribution of labor, the value of which is likely to match the A.I.D. and BEV resources by the time the project is repaid.

A.I.D. grant funds of $300,000 will play an important role in achieving the institutional development outputs described above. A long-term(three years) Ecuadorean consultant will be contracted as a USAID PSC to help expedite and monitor the project. The consultant will be an architect or an urban planner/economist. He will work closely with the JNV Regional Offices to explain the project, promote linkages and interchange with local municipalities and developers, help with the incorporation of revised infrastructure standards and new construction materials, and develop a reporting and follow-up system. More than half of the consultant's time would be spent in the field working with the JNV's Regional Offices. The estimated costs of this consultant over three years is $115,000 of which $75,000 are for salary during the three years, and the balance for acquisition, operation, and maintenance of a field vehicle, per diem, and travel.

Additionally, grant funds would underwrite the costs of three design competitions to promote the participation of private sector professionals in the development of innovative low-cost designs that incorporate local materials. These competitions would be carried out in collaboration with JNV Regional Offices. Results would be used in the development of subprojects financed under the HG loan. The A.I.D. grant funds would be used to reimburse the design costs and to construct pilots or models to field test the proposed use of the materials and procedures specified by these designs. A total of $75,000 is budgeted for this purpose, based on an estimated need of $25,000 per competition.

The third element of the grant component is $100,000 to carry out studies and training that will assist selected secondary cities resolve key financial and/or administrative problems. As JNV Regional Offices develop relationships with collaborating municipalities, specific problems will arise regarding the municipalities' ability to make commitments to provide services and maintenance. The technical assistance studies and training financed under these activities would help individual municipalities improve their financial and administrative capacity to participate in the JNV's housing subprojects. Local revenue generation could be stimulated through studies in such aspects as water and power rate structures, local property tax administration, user charge systems, etc. Technical topics such as building codes, land inventories, and maintenance plans for access streets and utilities would also improve the municipalities' ability to participate in JNV sponsored subprojects.

The $100,000 budgeted for these studies is based on an estimated cost of $25,000 per study for four studies during the project. The studies would be contracted to Ecuadorean consulting firms. Each study would entail about eight person-months of professional services and supporting clerical, administrative, and logistical costs. The remaining $10,000 of the grant funds would be available as a contingency reserve.

In addition to the $300,000 programmed herein, grant funds under the Solanda Project will be available for related short-term technical assistance and training. For example, USAID/JNV could agree to bring in a TDY consultant to help with the structuring and judging of the design competition. Additional TDY consultants could assist as needed with the training of JNV staff in the administration of the home improvement programs, consideration of environmental concerns, and generally improving the effectiveness of Regional Office staff. Technical assistance would be directed to BEV in such areas as adapting collection procedures to the special needs of very low income families and for savings mobilization. Also, these funds could be used for short-term training and inspection trips by JNV Regional Office staff to learn about relevant experiences in other countries.

The host country contribution to the overall institution building effort is estimated at $120,000. This amount represents the cost of the additional field staff to be hired by JNV in 1982, 1983, and 1984, the costs of increased in-country travel, and seminars for Regional Office staff. Apart from the inputs furnished by this project, USAID has discussed with PRE/HUD the need for technical support to assist with the development of approaches suitable for low income rural population. Tentative agreement has been reached that PRE/HUD will provide up to $40,000 in consulting services for this purpose.

A final important project input will be the technical resources available in USAID, RHO/PSA, and PRE/HUD. The USAID Housing and Urban Development Division will include: a Chief HUD Officer who is an experienced architect and housing officer; a PSC Housing Advisor who has extensive experience with home improvement programs and cooperative housing who will work on all Ecuador HG and related projects (both ongoing and planned); and a PSC Urban Community Development Advisor who will work mainly on the Solanda Project .A full-time secondary cities advisor will be contracted to provide technical assistance directly to JNV Regional Offices, municipalities, and local develop- ers in subproject development and implementation. USAID will be further backstopped by the technical personnel of RHO/PSA and PRE/HUD. These technical resources will not only ensure adequate USAID monitoring but they will be a key element in continuing the JNV/BEV -- A.I.D. policy dialogue and assisting JNV/BEV facilitate overall project implementation.

E. Beneficiaries

This project will benefit low income families residing in a number of Ecuador's secondary cities. Approximately 13,000 families with 1981 incomes of less than S/4,300 ($130) a month will benefit. Beneficiaries will generally be members of the informal sector such as self-employed artisans, vendors, construction workers and personal services workers. Most are migrants from rural areas or smaller towns. Heads of households are young, generally under 35. Single women heads-of-households will be primary beneficiaries. In coastal towns beneficiary families currently live in squatter settlement which lack services while in highland cities many of the beneficiaries live rental crowded quarters in older, subdivided houses. Many potential beneficiaries have organized community associations or housing cooperatives in order to more effectively obtain housing and services which for them are of high priority. A more detailed description of the target group fom which project beneficiaries will be drawn is presented in Annex V -- Social Soundness Analysis.

IV. PROJECT ANALYSES

A. Technical Analysis

1. GOE Policy on Technical Issues

GOE policy, as presented in the National Development Plan, 1980-1984, is emphatic about raising the standard of living of families living outside of Quito and Guayaquil, expanding their economic opportunities, and redirecting investment to those areas to attract and maintain their populations. The Plan details elements that include, among others, fomenting shelter programs to reach the lowest income levels. To accomplish this, the Plan indicates that programs such as home improvements, urban upgrading, and progressively developed new basic core unit construction are appropriate. The Plan also calls for the use of improved local building materials and states that the infrastructure, shelter, and community facilities programs and building materials supply development are to create employment opportunities in housing project areas. This is a radical departure from the GOE policy during the 1960s and 1970s during which the JNV: a) maintained artificially high standards thereby orienting its projects to the middle and upper middle classes; and b) imposed design solutions, building materials choices, and project administration responsibilities from Quito.

The Plan mandates that the public sector shelter institutions decentralize their operations and stresses that housing projects carried out in urban areas outside of Quito and Guayaquil are to respect and promote the cultural pluralism found in the Sierra, on the coast, and in the eastern jungle regions. This orientation translates into housing projects which include regional building materials, labor intensive construction, and credit systems appropriate to the economic base and income cycles specific to the different regional contexts.

The Shelter Reference Plan for 1980-1984 operationalizes these objectives by quantifying the aggregate demand and orienting the supply towards income levels traditionally excluded from the housing market. It develops a typology of six shelter solutions based on the principles that: 1) housing needs will be satisfied progressively with improvements of space and quality carried out in sucessive stages as family incomes increase; and 2) the primary concerns of beneficiaries will be legalizing tenure and improving health.

JNV's adoption of a typology to carry out these principles is an important first step in developing affordable dwelling solutions for low income families earning below the median income in urban areas outside of Quito and Guayaquil. The typology includes 1) home improvement loans for upgrading squatter areas and for expanding new basic core units; 2) serviced sites with a sanitary core on lots of no more than $100m^2$; 3) piso-techo and enclosed basic core units of $35m^2$ to $45m^2$ on lots of no more than $100m^2$; 4) basic unfinished units of $45m^2$ to $60m^2$ on lots of up to $120m^2$; 5) basic unfinished units of $70m^2$ to $80m^2$ on lots of up to $120m^2$; and 6) $80m^2$ walkup apartments. Families earning below the median income will opt for one of the first three solution types depending on their capacity to pay.

Consistent with these principles, the project proposed herein will finance a range of individual progressively developed solutions. In addition, the packaging of each subproject will vary to fit the specific situation. The fully integrated approach, based on the Solanda model, will be used where JNV can successfully mobilize assistance from public and private sources to address the broad spectrum of urban development needs including: community services such as health, education, parks and transportation; complete infrastructure for power, water, and sewerage; employment generation; and cooperative promotion and development.

Obviously, not all subprojects will have all the elements required in a fully integrated approach. An employment generation component, for example, will be dependent on the existence of skilled and highly motivated entities other than JNV to assist homeowners with the promotion, organization, and development of new enterprises. Such assistance might be forthcoming for some of the subprojects developed by regional development organizations. Moreover, the smaller subprojects likely will not need their own health or education facilities, nor would parks and playgrounds be practical. Thus, JNV will have to tailor each subproject to fit the specific needs and to take advantage of available support systems. At a minimum, however, as a matter of JNV policy each subproject will be fully coordinated with local authorities to assure basic needs such as potable water are attended and that the subproject is consistent with the municipalities' overall growth plans.

The rural housing component included in the PID for this project has been dropped as a result of further technical analysis. During the preparation of the Project Paper, the feasibility of a rural housing component was reviewed thoroughly by the JNV, the GOE's Integrated Rural Development Secretariat (SEDRI), and USAID. Concern was raised based on past unsuccessful rural housing programs in Ecuador. The JNV/BEV are especially concerned about the complexities of a dispersed rural housing program, namely the problems of debt capacity, repayment, and effective demand by the rural population. SEDRI considers that its programs to increase agricultural productivity and production must be firmly underway before a rural housing element is added to its integrated approach. The exception, of course, is for market towns in IRD project areas where the target is an urban resident. Nevertheless, the JNV and SEDRI are contunuing a dialogue about the possibility of developing a future joint rural housing program. USAID has agreed to facilitate this dialogue by providing short-term technical assistance from PRE/HUD or other sources as appropriate.

2. Typology of Shelter Programs

a. New Construction

This sector loan project will support GOE shelter sector policy specified in the JNV/BEV programming documents that call for progressively developed new construction projects and home improvement and community upgrading programs. Of the six shelter types approved for construction by the JNV in its Shelter Reference Plan, the first three types are affordable by the project target population. The 1981 cost for each of these three types is as follows:

Type One: home improvement loans (see below)

Type Two: $72m^2$ Urbanized Lot with Sanitary Core
Coast. S/65,000 Sierra: S/68,000

Type Three (a): $75m^2$ Urbanized Lot with Sanitary Core and $35m^2$ of Enclosed Area -
Coast: S/90,500 Sierra: S/95,650

Type Three(b): $75m^2$ Urbanized Lot with Sanitary Core and $45m^2$ of Enclosed Area -
Coast: S/97,850 Sierra: S/103,550

The 1981 unit costs of the principal construction components for new units are:

Component	Unit Cost (S/) Coast	Sierra
Land	$210/m^2$	$240/m^2$
Infrastructure	$350/m^2$	$360/m^2$
Service Connections	15,000	15,000
Sanitary Core Unit	8,000	8,000
Enclosed Area by Local Builder	$730/m^2$	$790/m^2$

Land

The JNV estimates that for an urbanized lot of $100m^2$, the cost of services would be approximately S/47,500. Thus, for a site and service solution of S/68,787 allowable land costs could be no more than S/21,287 for the lot, or $S/213/m^2$ of salable land, which implies approximately $S/141/m^2$ for the gross area. It is now difficult to find land at these prices in the larger cities and even in the medium size ones, especially in the Sierra.

Accordingly, the JNV/BEV are continuingly acquiring parcels of land on which to develop subprojects. One of the principal resources that other developers would be able to contribute to subprojects financed by this HG loan would be raw or urbanized land. Because municipalities and cooperatives hold significant parcels of land in many areas, the JNV is working closely with them in an attempt to acquire suitable sites at a reasonable cost and/or build on the efforts low income families have made in obtaining land that lacks basic services. For 1982 the JNV/BEV land acquisition program is budgeted at $3.0 million, of which slightly more than 70 percent will be in provinces other than Pichincha (Quito) and Guayas (Guayaquil).

Further land cost savings can be made in the coastal regions if the JNV would modify its project development procedures which usually call for excessive and expensive site preparation. In the Los Tamarindos project in Portoviejo, land cost per square meter was increased by S/400/m^2 due to excavation and infill costs. Ironically, the traditional construction on the coast consists of a house raised about 2.5 meters on stilts that stands as firm on clay soil as on any other. The change of topsoil is necessary only because the JNV house design follows a model foreign to the region. As this project seeks to use improved traditional building methods, it is expected that costly site preparation can be avoided and that site preparation costs will not unduly add to overall subproject costs.

In addition, adequate sites on the coast have been less difficult to acquire because alternative methods to provide basic services have been employed. Such methods include the provision of water by tank cars and the disposal of solid waste through septic tanks and latrines. These alternatives allow lower cost land to be aquired because of its location while allowing housing and infrastructure institutions to anticipate and plan rapid urban growth and then carry out the installation of permanent water and sewerage systems. The alternative methods for providing basic services are being considered in land scarce areas in the Sierra as well.

Infrastructure

Because infrastructure normally represents a significant portion of project costs, JNV is pursuing rational reductions of infrastructure standards for application in their low income shelter projects. These new infrastructure standards are laid out in the JNV's sites and services program document. Just as the shelter units have been designed to accommodate progressive growth and improvements, JNV is experimenting with the progressive and alternative provision of services. Technical assistance will help JNV in its effort to effectively reduce infrastructure costs as well as help convince the municipalities of its benefits. Municipal building codes are often unrealistic. Their standards do not reflect the economic realities of the vast majority of families in Ecuador and have excluded many families from access to basic services. In coastal cities, for example, separate storm and water drainage systems are required; in others, cast iron pipe is required in spite of lower cost, available alternatives.

Since 1979, GOE urban development policies have been radically altered in order to provide basic services to low income families. In its efforts to elicit municipal support for the new infrastructure standards JNV held a special conference to bring together national and municipal authorities responsible for urban development standards and shelter programs to familiarize themselves with the issues and methods involved in the rational reduction of infrastructure standards. The results of the conference are presented in the document Normas Técnicas de Urbanizacion y Vivienda. Technical assistance to be provided at the Regional Office level will assist the JNV/BEV define and implement this policy.

Construction Materials

JNV policy supports the use of traditional building materials and self-help as well as small scale industrialized building components as the principal means of building more and better dwellings in less time and at less cost. JNV recognizes that most houses in Ecuador are built by their owners using local materials readily available. JNV states that what is necessary is to make greater use of the materials, design, and dimensioning features of the traditional systems; train labor in improved construction techniques; and introduce cost controls and analysis as an integral part of materials considerations.

JNV is considering the production of small scale building components that: (a) makes use of existing industrial technologies; (b) requires small investments and can be carried out over a wide range of geographic locations, thereby supporting GOE decentralization efforts; and (c) makes intensive use of unskilled labor.

The traditional building materials for the coastal region are bamboo and wood for walls and corrugated metal sheeting for roofing . In the Sierra, adobe, fired clay brick, or rammed-earth walls with clay tile roofing are the traditional building types. JNV is interested in improving and utilizing traditional building materials as an important element of its decentralization policy and as a means of controlling costs, promoting self-help, and supporting local developers and building materials suppliers. JNV has already produced a manual on building with adobe for application in the Sierra and another on building systems and designs traditionally used in rural Ecuador.

JNV will be hosting a seminar in September 1982 on building with bamboo. A.I.D. will assist JNV in its efforts to better utilize traditional building materials and methods and other appropriate construction technologies. Technical assistance will be provided to assist JNV develop shelter solutions built of improved local building materials and alternative designs based on lower spatial standards that further refine shelter alternatives for low income families.

The building materials options would make use of replenishable resources for community facilities and dwellings. The development and maintenance of the supply of replenishable resources such as bamboo and wood would upgrade and maintain the natural environment and provide a practical use for the replenishable resources created. This project will work with private sector building materials suppliers and cooperative production associations to establish an improved supply of regional materials.

The design alternatives built of "modern" (i.e., current conventional) building materials also offer cost effective options by limiting constructed area. For example, reducing the initial stage of the piso-techo and basic core units to approximately 18m², about half of the area used until now, would significantly reduce the income requirements for family eligibility. The flexibility derived from the trade offs between building materials and constructed area standards provides the means of controlling and maintaining cost levels based on this program's beneficiary income profile.

b. Home Improvement

The home improvement component will provide an estimated 5,200 individual loans to families earning below the median income. These programs will rely on high levels of participation from the beneficiaries in terms of design decisions, materials selections, and construction management.

Illustrative examples of home improvement loans that could be included in these programs are shown below. Loan priorities will follow the guidelines presented above that emphasize a logical sequence of tenure, health considerations, adequate space, and quality of materials and finishes. Loans to resolve tenure considerations will be made almost exclusively on the coast due to the concentration of squatter originated settlements. Forced displacement of squatters has almost entirely been supplanted by a more positive attitude on the part of national and municipal authorities, and de facto possession has been granted. While this provides a certain degree of security that encourages improvements and investments on the part of the squatter families, it is not a substitute for legal tenure which opens new avenues for low income families to credit and other opportunities to improve their standard of living, especially their shelter. Thus, payments to purchase the land from the municipality and other owners and for corresponding titling costs will be eligible under this component. Providing an ample margin for land cost inflation, a square meter cost of S/400 for raw land is used. If a family has settled one 100m² lot a loan of S/40,000 ($1,200) would be required to legalize ownership. Additionally, substandard dwellings will require infrastructure and infrastructure related improvements such as sanitary cores and kitchen spaces as well as addition of space to reduce overcrowding. Roofs and floors are other components for which a high demand has been observed.

Illustrative Examples of Home Improvements

1.	Legalize tenure	up to S/40,000
2.	Water connection	3,500
3.	Electrical connection	3,500
4.	Septic tank	5,000
5.	Sewerage connection	8,000
6.	Sanitary core (incl. shower, sink, and toilet)	8,500
7.	Kitchen unit ($6m^2$ incl. sink and counter)	6,200*
8.	New room (3m x 3m)	30,300*
9.	New roof ($60m^2$)	16,800**
10.	Cement floor ($20m^2$)	3,500*
11.	Windows	1,500
12.	Doors and locks	1,850

* Guayaquil costs
** Cuenca costs

The JNV/BEV home improvement program now being implemented in Guayaquil is providing valuable experience that will be the base on which similar programs outside of Guayaquil will be built. Policy regarding credit issues such as the type of guaranty to be required, administrative issues such as concentrating loans in priority areas instead of scattering them, and programmatic issues such as loan priorities for individuals or community infrastructure improvements have all been dealt with under the Guayaquil project.

In some communities there may be a need to install or upgrade basic infrastructure. Illustrative examples of infrastructure improvements are presented below:

Illustrative Examples of Infrastructure Improvement Costs
(costs relate to lots of $100m^2$)

		Coast	Sierra
1.	Water line plus house connection	S/11,156	S/13,393
2.	Sewer line plus house connection including street drainage	24,500	18,353
3.	Electrical line plus house connection	10,377	10,230
4.	Street paving	9,510	5,025
5.	Sidewalks and Curbs	4,924	6,187

NOTE: 1981 costs

3. Conclusions

USAID and RHO/PSA conclude that it is technically feasible to produce the type of progressive shelter and improvement solutions affordable by the target population.

The capacity to urbanize lots and erect traditional and conventional shelter units has been amply proven by JNV and the target population. Both industrial and traditional building materials in common use are readily available in sufficient quantities such that no significant distortion of their markets will result from the execution of A.I.D.-financed projects. Because construction will be geographicaly dispersed, labor scarcities will not be confronted. Past acquisitions of land by JNV/BEV, together with their current program and proposed efforts to seek the participation of other developers such as municipalities and cooperatives, provide assurances that sites will be available for projects.

As part of the process to plan and build low income shelters, constant review and refining of the initial JNV shelter typology is occurring. The continuing dialogue between JNV/BEV and A.I.D. that was initiated with the Solanda Project seeks to assist JNV to improve shelter options that are affordable by even larger segments of families earning less than the median income. An important aspect of the dialogue deals with the effects of trade offs between building materials standards ("modern" vs. "traditional") and spatial standards (constructed area) in terms of shelter design and cost. Assuming for a specific income level a maximum dwelling unit cost based on capacity to pay, the trade offs imply a larger constructed area for dwellings built of lower cost materials (usually regional ones such as bamboo, improved adobe and fired clay bricks) or a smaller constructed areas for dwelling solutions built of costlier materials (usually concrete blocks, reinforced concrete and steel structures). It is this type of flexibility that the project seeks to develop at the JNV Regional Office level.

B. Institutional Analysis

1. The GOE Policy for Shelter Sector Institutions

The National Development Plan calls for its two principal shelter sector institutions, JNV and BEV, to assist in the achievement of the Plan's fundamental objectives of national integration, modernization and reorientation of the public sector, and social justice. To achieve these goals the Plan requires that investment be decentralized; that administrative reform be carried out to improve the efficiency of public administration and the quality of its services; that popular organizations be stimulated in their various forms - cooperatives, neighborhood committees, labor unions, etc; that massive housing programs - oriented primarily towards lower income groups and emphasizing self-help construction techniques and employment generation - be initiated; and that public expenditures be revised and reoriented to favor the least privileged social and economic groups.

The National Development Plan directs the BEV to take the necessary steps to capitalize itself with funds from national and foreign sources. BEV is to provide the financial support for social impact housing programs approved by the JNV, seek new financial mechanisms for housing, identify refinancing formulas through mortgage programs with other national financial institutions, and support the development of the savings and loan (mutualista) system to the degree it responds to the GOE's social objectives for the shelter sector. The Plan also sets out the responsibilities and intended beneficiaries of the principal shelter sector institutions. JNV is to dedicate at least 70 percent of its resources to low income solutions not to exceed S/200,000 ($6,000). The mutualista system is to program ten percent of its resources for such units and the Social Security Institute (IESS) is to provide 30 percent of its resources for similar shelter solutions.

The National Plan's guidelines to JNV/BEV emphasize two principal themes: decentralization of investment and services and incorporation of marginal areas into the urban fabric of their localities. The Plan calls for special emphasis to be given to the development of marginal areas through the provision of basic services and shelter and rationalizing the process of programming, administering, and implementing shelter, infrastructure, and community facility programs for urban areas outside of Quito and Guayaquil. Institutionally, this translates into JNV/BEV actions to: strengthen and increase the JNV/BEV Regional Offices; delegate authority and responsibility for project identification and design; and exercise the full mandate and powers legally delegated to them. According to the Plan, the decentralization of JNV/BEV operations is to allow the Regional Offices to identify institutional resources that could expand JNV/BEV impact and coverage; to articulate local demand in specific projects tailored to the socio-economic characteristics of the diverse clientele of the different Regional Offices; to support, improve, and acquire resources such as building materials and land; and to determine the administrative procedures and promotion activities that best fit the particular geographic, social, and economic circumstances of their areas of responsibilities.

2. The National Housing Board (JNV)

JNV was created by Supreme Decree No. 162 on February 23, 1973. It has been endowed with the broad range of powers necessary to carry out the mandate presented in the National Development Plan: viz., to establish and program national housing policy; coordinate public and private entities operating in the sector; coordinate with municipalities on urban development through rational land acquisition and housing programs; and construct projects it has programmed and approved. The JNV Board of Directors includes the cabinet level officer who functions as the President of both JNV and BEV and representatives of the Ministers of Finance and Health, the Social Security Institute, the National Planning Board, the Municipal Government Association, and the savings and loan associations.

Over the last two years the JNV policy functions and operations have been given a new dimension. Until just recently, JNV has been dependent upon BEV to cover its administrative costs from BEV's budget. While JNV and BEV have been and will remain closely coordinated institutions, they have now been awarded independent budgets and will keep separate books to better manage their individual institutions. JNV has now shifted its project specific and production/construction orientation to an increasingly more participatory and decentralized one through a series of institutional objectives developed by the new JNV Planning Directorate. These objectives affect four principal areas: administrative, financial, legal, and technological.

Administratively, the JNV's objectives call for its decentralization through: (1) the addition of two Regional Offices; (2) training technical staff to improve on their present capabilities and to keep abreast of new developments in their respective fields; (3) coordinating with municipalities and other public and private institutions and organizations regarding provision of project sites, infrastructure, and community facilities for BEV financed projects; (4) improving its programming, monitoring, and evaluation methods to rationalize project implementation procedures; (5) carrying out pilot shelter programs in priority rural areas; and (6) seeking technical assistance from international organizations and other countries to improve its methods of planning and project design for housing and urban development.

Financially, the JNV objectives are to: (1) increase lines of credit for the implementation of programs directed to the low income sectors of the country; (2) adjust the finance systems to characteristics of the intended beneficiaries; and (3) evaluate and reformulate the housing finance system to reflect the economic and monetary policy of the country.

Legally, the JNV objectives are to: (1) reformulate its current policy to be able to establish new urban land policy; and (2) analyze and modify the relationship and controls that exist between JNV/BEV and the savings and loan system.

Technologically, the JNV objectives are to: (1) maximize the supply of shelter solutions through the use of appropriate technologies, new construction systems based on small scale prefabrication concepts and components that support self-help construction efforts, and dwelling types that conform to the National Development Plan's guidelines to concentrate investment in low income projects; (2) decentralize shelter programs to include all the provinces of the country, especially urban areas outside of Quito and Guayaquil; and (3) increase its production level by contracting project implementation with private sector construction companies.

The implications of the JNV objectives are reflected in the major changes that have restructured JNV institutionally and recast JNV's staffing patterns and required skills. Functionally, JNV has been reorganized (see JNV organization chart, Annex IV) adding an Administrative and Finance Directorate, a Legal Directorate, and a Planning Directorate.

The Administrative and Finance Directorate will manage the JNV accounts for the first time. Among its responsibilities will be the task of keeping track of and control over administrative costs. It will also determine administrative and finance costs on a project basis to be charged to the projects' beneficiaries as part of the recuperable project cost. The Legal Directorate will be charged with facilitating the legalization of tenure, determining procedures for contracting project construction and land acquisition, and coordinating with the BEV legal division on matters such as loan criteria, forms of guaranties, and collective and individual mortgages.

The former Program Department which essentially dealt with the design and implementation of specific projects has been transformed into a Planning Directorate whose head reports directly to the President and the General Director of the JNV. The Federal Republic of Germany will be providing grant technical assistance to the JNV headquarters, and especially the Planning Directorate, that would address macro level programming matters. The Planning Directorate is responsible for analyzing socio-economic data, identifying target groups and their capacities to pay, and recommending the appropriate program types that conform to the economic limitations of the intended beneficiaries. The Planning Directorate coordinates its programming guidelines with the Technical Directorate that tailors its specific designs to the economic and demand factors. The Planning Directorate also provides guidance and technical assistance to the JNV Regional Offices.

The most important effort of the Planning Directorate to date in asserting its role at the policy level has been the completion of the National Study of Housing and Demand for 1980-1984. This study served as the basis for the evaluation of how the different housing finance institutions will invest their resources with JNV/BEV focusing on the lower income groups. This study is the first attempt in Ecuador's housing sector to rationalize the application of shelter funds by the public and private sector at different income levels. On the basis of the demand study, the Planning Directorate developed The Shelter Reference Plan which in essence is an operational document indicating the types of structures to be produced in each locality to serve the identified demand.

In addition to the structural reorganization of JNV that modified and expanded its functional capacity to carry out the new more participatory and decentralized orientation, JNV is adding two Regional Offices to expand its national coverage as mandated in the National Plan, to set in place an outreach mechanism to provide JNV headquarters data necessary for effective planning, and to carry out the Annual Operational Plans in an effective way. The Regional Offices will cover all twenty provinces of the country as follows:

Provinces Covered by JNV Regional Offices

Guayaquil	Portoviejo	Loja	Cuenca	Quito	Riobamba
Los Rios Guayas El Oro Galapagos	Manabi	Loja Zamora-Chinchipe	Canar Azuay Morona-Santiago	Carchi Imbabura Pichincha Cotopaxi Esmeraldas Napo	Bolivar Tungurahua Chimborazo Pastaza

With the establishment of the Quito Regional Office in a location away from the JNV/BEV headquarters, the functional directorates located in Quito will be able to dedicate themselves to the macro and policy level efforts that have been absent from past JNV activities. The Regional Offices would then have the responsibility for project identification and implementation as laid out in the JNV planning documents and annual operational plans.

JNV is increasing the monitoring and technical assistance visits to the regions to strengthen the relations between the JNV Central Office and the regions and prepare regional staffs to absorb a larger share of responsibilities. Site visits are now complemented with training seminars with special emphasis placed on techniques for producing shelter programs for families with incomes well below the income levels of previous beneficiaries of JNV projects. Training seminars have been carried out for the JNV social workers. A manual has been prepared and distributed detailing techniques for using adobe in home improvements and progressively developed housing.

JNV now has a staff of 394, with 263 professionals, mostly architects and engineers, (see Annex IV for detailed staffing pattern) that reflects its past production/construction orientation. Most of these professionals (121) are located in Quito, with the remaining 142 located in the Regional Offices with the smallest number (9) in Loja, then Cuenca (10), Portoviejo (10) and Guayaquil (78).

The JNV decentralization and participatory orientation now in effect has obliged the JNV headquarters to review its staffing patterns and skills and train its Regional Office personnel to include a stronger social work/community participation capacity. The review produced a Regional Office profile that includes at least one social worker/community development person, architect/engineer, technical support staff such as project inspectors, a lawyer, and a financial analyst. JNV also provides a technical and a social work employee to each of the BEV agencies.

While the quality and quantity of the JNV Regional Office staff is considered adequate to manage its past activities, the institutional decentralization is increasing the responsibilities at the field level. The expanding responsibilities include project promotion, design and implementation, social organization and community development, project contracting, inspection,management, and legal matters. JNV's approach to provide the skills now required by the Regional Offices includes two separate but complementary actions.

The first action is to complement the existing skills by training technical, social work, and community development personnel and with staff additions as needed. The JNV restructuring plan has been approved by the National Personnel Office and is moving forward as budgetary constraints allow. JNV operates under civil service salary guidelines and has had difficulty in the past attracting and maintaining its quality staff. This situation has been corrected as part of the JNV restructuring providing salary increases as of December 1981. The staff training and additions will help compensate for past JNV weakness in local level project demand analysis, programming, target group identification, and evaluation. As a second line of action, JNV will seek the cooperation of private sector developers, community organizations such as cooperatives and credit unions, and municipalities to create an impact and coverage greater than that which additional staff alone could realize.

The A.I.D. HG loan will be complemented with grant funds that will be used in part to contract a long-term advisor. The advisor will work closely with JNV's Regional Offices to adaress the following types of institutional constraints:

(i) the time lag that exists between top management's policy decisions regarding project type, costs, and beneficiaries (well below the income levels previously addressed by the JNV), and implementation of those decisions by the Regional Offices;

(ii) the residual resistance by staff in the Regional Offices to the new solutions; and

(iii) the departure from the usual marketing of JNV dwellings to the more promotion and community oriented approach that progressive development requires.

In addition, grant funds under the Solanda Project may be used to finance short-term consulting services on specific problems as they arise.

3. The Ecuadorean Housing Bank (BEV)

The GOE published the Special Decree (Ley de Emergencia) that established BEV as an autonomous public housing institution in March, 1961. The new institution replaced the Ecuadorean Social Security Institute (IESS) as de facto public sector agency providing mortgage loans. BEV's original mandate was to provide houses for low income families. BEV's responsibilities included the planning, financing, and construction of housing projects as well as the development of a savings and loan system and support for cooperatives. It has since been endowed with broad powers to determine housing credit policy, issue bonds, collect savings, and other banking activities.

A.I.D. directly promoted the establishment of BEV by providing technical assistance and a $5 million seed capital loan. Later support was provided through an A.I.D. guaranteed loan of $6 million to stimulate the savings and loan system. By 1973, the year in which JNV was created, BEV had sold approximately S/360 million in bonds. Since 1964, the GOE had increased its support for BEV by providing S/1.9 million annually. BEV had established a loan portfolio of S/356 million and assets of S/775 million as of 1972. Its support at that time for the savings and loan system had reached more than S/205 million.

In the early 1970s, BEV began a program to increase its capital. In July, 1972, BEV was empowered to receive savings, and a Bidding Law was established that required that five percent of contractors' guarantee funds be deposited with BEV as well. The result of these operations was to increase BEV's loan portfolio from S/456 million in February, 1972 to S/4,098 million in 1980. Support for the savings and loan system had reached more than S/444 million in 1976 to S/476 million in 1980.

BEV has four main branch offices in Guayaquil, Cuenca, Loja, and Portoviejo and 14 agencies outside of Quito, the Central Office. BEV's Central Office has recently been restructured with the idea of reducing its dependence on dwindling GOE resources and carrying out its policy of full cost recovery. To support this, three new departments have been established to manage and eventually divest BEV's building materials factories to the private sector, to monitor BEV's local offices, and to improve operating procedures.

Central to the responsibility of BEV's headquarters is the determination of financial policy that includes interest rate considerations; loan terms and guaranty requirements, resources acquisition, allocation, and recuperation; and project evaluation and monitoring of project accounting. The responsibilities at the branch office include (i) maintaining books and records of their respective projects, loans, and other agreements; (ii) maintaining inventory controls of materials and supplies; (iii) establishing cash flow projections based on Central Office guidelines and resource allocations; (iv) registering and listing mortgages of project beneficiaries; and (v) qualifying beneficiaries.

Technical assistance to BEV to be provided by the IBRD would include computer terminal links to the branch offices with the main office in Quito. This system will facilitate the coordination of financial information and allow BEV's Credit and Finance Directorate to prepare project-specific monthly accounts and annual comprehensive project financial status reports. This will complement the decentralization orientation of this project to take the project identification and credit process out of the Central Office and make each branch a more self-sufficient lending entity.

The quality of BEV's staff (919) is generally high since BEV, as an autonomous bank, is not bound by civil service salary levels and can pay competitive salaries. At present, the bulk of the professional operating staff of BEV is concentrated in the Quito headquarters (62) and the Guayaquil branch (42). Secondary city offices typically have 12 to 18 employees each including a lawyer and accountants who handle accounting, collections, and savings deposits. In each of BEV's branches and agencies JNV has located technical and social staff to complement BEV staff skills where JNV has projects. (See Annex IV).

Project accounting is performed by each local office, and consolidated monthly through reporting to the Quito headquarters. This network coordinates with the JNV through an annual budget now detailed in the JNV Operational Plans for its Regional Offices.

IBRD missions have recently reviewed BEV's accounting systems and internal audits for the last three years and found them to be timely and highly satisfactory. With the exception of the need for improved financial planning, accounting was found to be adequate at both the national and local levels. Internal audit is done by a staff of 34 professionals who are paid by BEV but who report to the National Controller and are independent of BEV management. In addition, an external audit is performed by the Superintendency of Banks each year.

The most experienced branch office in dealing with the target group is the one in Guayaquil. This experience is being conveyed to the other branches through seminars and publications in anticipation of the implementation of the IBRD and A.I.D. programs. Specifically, BEV policy regarding beneficiary selection criteria for home improvement programs and new construction projects is being revised to accommodate the particular characteristics and limitations of low income families, a group with which the BEV has had limited experience. Project standards, types and levels of loan guaranties, repayment cycles, the use of intermediary groups to assist in payment collection, and other issues are now being decided based on the experiences gained from executing the Solanda and the Guayaquil projects.

4. <u>Other Participants</u>

a. <u>Cooperatives</u> - JNV/BEV have financed and supported a number of cooperative housing projects mainly for middle income families. This has allowed JNV/BEV to gain experience in dealing with organized groups as a way to reduce administrative costs. The proposed project is designed to take advantage of this experience at lower income levels.

A first experience has taken place in Guayaquil in which home improvement programs have been channeled through organized groups which assume responsibility for the repayment of the loans, the allocation of resources, etc. BEV has great interest in replicating this experience in other areas.

Credit unions are strong in parts of Ecuador and BEV is prepared to explore the possibility of replicating the Guayaquil experience using the credit unions as a conduit of the resources.

b. Municipal Governments - Local governments will participate in the project as suppliers of sites for new construction activities and as the coordinating entities for the provision of public services. This coordination role will be emphasized in the criteria for project design as it follows on one of the primary objectives of the Solanda Project and permits continuation of a process of integrating shelter programs with the social and physical infrastructure programs that are also part of the national development planning process for the secondary and tertiary cities.

Municipal governments frequently resist change in the standards applied to low income urban development activities. JNV cannot impose standards on municipal governments. Careful negotiations must be carried out to ensure the application of standard. that reflect not only adequate levels of service but also the cost limitations of projects designed for low income families.

JNV itself is already acquiring considerable experience in dealing with municipal governments on these issues. The knowledge gained can be applied to a wider geographic range of communities and to a national development process that helps local governments improve their capacity to manage their own resources that integrate shelter with other infrastructure projects.

c. Private Sector Enterprises - Private enterprises will participate in the proposed project principally as contractors to JNV for the execution of the new construction components; as contractors to project beneficiaries for home construction or improvements; and as manufacturers of construction components and suppliers of local building materials.

Past BEV performance in the management of its building materials factories has been poor. The factories produce cement, bricks, concrete pipes, timber, and sanitary ware. With the exception of the Selva Alegre cement plant which has just increased its prices 60 percent to reach the breakeven point, the factories will receive technical assistance from IBRD to study BEV's options regarding the possibilities of improving the current BEV management in the near term and the possibility of eventually divesting these assets.

5. Conclusions

In summary, BEV and JNV are already strong institutionally. BEV has a low delinquency rate and has been punctual in amortizing its foreign debt. The historical record indicates that BEV will administer the project in a satisfactory manner. Recent changes in interest rate policy, financial planning, and reorganization indicate BEV is in favor of decentralization and is fully capable of implementing this project. BEV has the outreach mechanism needed to finance shelter solutions in secondary cities and the HG loan resources will have a substantial positive impact on BEV (see Financial Analysis).

JNV has moved decisively into its new policy making and programming role and maintained its proven construction capacity. JNV is also taking the necessary steps to accomplish its decentralization orientation through its programming and through training and limited expansion of Regional Office staff, especially in the social work/community development areas.

C. Economic Analysis

The following analysis demonstrates that, considering the productivity of the use of project resources, the output generated by BEV, and the capacity of the beneficiaries to pay for the investments and to cover the current costs, the implementation of the project is justified on economic grounds.

1. Financial Viability

The project is finanacially sound when analyzed from the standpoint of BEV. A financial cost/benefit analysis demonstrates that, on the basis of the cash flow presented in the annexes, the project is financially attractive to BEV. USAID has projected a financial Net Present Worth of (positive) 104.6 million sucres when figures were discounted at 15 percent. Table IV.1 shows a positive annual cash flow in all years but one. However, this one year negative flow is more than compensated by the positive flows during the ten year period.1/

In terms of the benefit cost (B/C) ratio, an appraisal of the value of the outputs received per unit of inputs (in financial terms) points also to the viability of the project. Table IV.1 summarizes the calculations made and points to a B/C ratio of 1.077 on a non-discounted cash flow, and of 1.091 when discounted at 20 percent. These figures suggest that the project is financially sound, even when time and potential inflation are included. One hundred dollars of inputs are likely to result in 108 or 109 dollars of value of financial output to the JNV/BEV.

Ecuador's debt service requirement has increased to 34 percent of exports for the public sector and to 46 percent for public and private sectors combined based on preliminary 1981 estimates. This trend is partially attributable to stagnating oil revenues which in turn are leading to increased foreign borrowings. Despite the abundance of potentially exportable oil reserves, the GOE will have to carefully manage its debt over the near term until its programs take hold to increase oil production and diversify exports take hold. Nevertheless, the GOE clearly remains financially capable of servicing its external debts. The proposed HG loan will not be a heavy additional burden for Ecuador because of its long-term nature.

1/ Since there are no negative cash flows in the first years of the project, an internal rate of return (IRR) cannot be calculated, since negative cash flows are a methodological precondition for estimating an IRR.

Table IV.1

TEN YEAR COST/BENEFITS AND CASH FLOW
(in thousands of sucres)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	TOTAL	Ratio
Costs	276,692	271,917	324,292	185,000	155,000	175,000	195,000	213,000	225,000	240,000	2,260,901	
Benefits	307,168	315,420	360,363	157,538	175,281	193,063	212,591	225,271	241,018	257,532	2,445,247	1.0771
Cash Flow	30,476	43,503	36,071	-27,462	20,281	18,065	17,591	12,271	16,018	17,532	184,346	
Discount factor 10%	.909	.826	.751	.683	.620	.564	.513	.466	.424	.385		
N P Worth	27,703	35,933	27,089	-18,757	12,574	10,189	9,024	5,718	6,792	6,750	123,015	
Discount factor 15%	.869	.756	.657	.571	.491	.432	.375	.326	.284	.247		
N P Worth a 15%	26,483	32,888	23,698	-15,680	9,957	7,804	6,597	4,000	4,549	4,330	104,626	
Discount Factor 20%	.833	.694	.579	.482	.402	.335	.279	.233	.194	.162		
N P Worth a 20%	25,387	30,191	20,885	-13,237	8,153	5,893	4,819	2,859	3,107	2,840	90,897	
Discount 50%	.667	.444	.296	.198	.132	.088	.059	.039	.026	.017		
N P Worth at 50%	20,327	19,315	10,677	- 5,437	2,677	1,590	1,038	479	416	298	51,380	
Discounted Benefits	255,870	218,901	208,650	75,933	70,462	64,677	59,313	52,488	46,757	41,720	1,094,771	
Discounted Costs a 20%	230,484	188,710	187,765	89,170	62,310	58,625	54,405	49,629	43,650	38,880	1,003,628	1.0908

2. Cost Efficiency (Least Cost) Analysis

An "economic" cost-benefit appraisal of the project, adjusting for externalities and shadow pricing, has not been prepared due to methodological problems, such as the fact that the externalities of housing projects are difficult to estimate or to quantify. In any case, it is clear that market prices alone do not convey the full economic benefit of this project. At least two important externalities, if quantified, could substantially increase the B/C ratio:

(a) the housing units are most likely to increase in value and provide an economic/financial benefit to the project beneficiaries; and

(b) the $25 million of HG resources represent highly valued foreign exchange. Only a relatively small percentage of project costs will be for direct or indirect foreign exchange costs. Therefore, there will be a significant net inflow of dollars to the Ecuadorean economy during the next two years which will help alleviate Ecuador's current balance of payment difficulties.

Given the uncertainty of an economic analysis based on some form of a benefit/cost measure, and the difficulty of assigning realistic monetary value to housing units which have a social and non-revenue producing character, a comparative analysis of inputs and outputs has been made with other types of housing solutions to evaluate the project's cost efficiency.2/ One indicator to measure the efficiency of the project is that some 9,400 new housing solutions will be delivered in several of Ecuador's secondary cities at a total cost of about $32 million. This compares favorably with the recently signed IBRD project which will finance 8,200 housing solutions in Quito and in secondary cities at a total cost of $38.4 million.

But this in itself does not say much about the comparative efficiency of the project and about the quality of the units. The ratio of effectiveness to costs of the housing solutions provided under the project (meaning the degree to which satisfaction of the housing needs has been achieved) would involve a somewhat subjective estimate of the acceptability of the different types of solutions. Thus, for example, the impact of a core house would have to be quantitatively measured against the impact of a full unit or of a serviced lot.

2/ In similar projects in other countries, e.g. in El Salvador, it was found that families could save from 27 percent to 52 percent in the costs of completing the houses, when the work is done through their own purchasing of materials and labor hiring. See: Fundacion Salvadorena Desarrollo y Vivienda Minima: Analisis del Proceso Evolutivo y de las Soluciones Autonomas, proyecto 'Repelo', May, 1979.

For this reason, the cost of similar units is compared in other projects to analyze whether more outputs have been achieved, by level of inputs. Table IV.2 shows the number of solutions which can be financed using the low cost progressive construction technologies and materials proposed for this project and compares them to the number of equivalent solutions which are being provided through other projects. It is clear that the technological and institutional innovations promoted by this project (e.g., use of local materials and progressive construction techniques, mobilization of resources from local organizations) allow JNV/BEV to achieve unprecedented levels of efficiency and deliver affordable housing to a greater number of low income families.

Table IV.2

Number of Units to be Obtained with an Investment of 10,000 dollars (1982)

	Other JNV/ BEV Projects*	HG-006
NEW UNITS		
- $18m^2$		
- Riobamba	1.5	Sierra: 3.8
- $18m^2$ on $100m^2$ lots		
- La Tolita	1.8	Sierra: 4.5
- El Emplame	1.8	Coast: 5.4
- Quito	1.5	
- Quevedo	1.8	
- Santo Domingo	2.0	
- $36 m^2$ on $80m^2$ lots		
- Babahoyo	1.2	Sierra: 3.9
- Santo Domingo	1.5	Coast: 3.6
SITES AND SERVICES		
- On $90 m^2$ lots		
- Machala	3.0	Sierra: 5.9
- Babahoyo	2.2	Coast: 4.6
- La Tolita	3.0	
- Quevedo	3.7	

* Figures have been adjusted to reflect mid-1982 prices.

SOURCE: BEV estimates made 3/12/81.

Not as readily quantifiable, yet of real impact, is the cost efficiency obtained from locating the housing solutions in secondary cities rather than in metropolitan areas. Migration has proven in various studies to bring about an improvement in the economic condition of migrants, yet it has also proven to be a serious burden to the economy of both localities: the one they come from, and the one they settle in. In terms of production derived from the migrants' labor, they may offset each other. But in terms of the provision of services, it is clear that diseconomies of scale work against the large metropolitan areas. For example, to accomodate the kind of migration that this project would help to curb would cost Quito S/12,000 in the provision of water and sewerage service for every new migrant, as opposed to S/8,500 in secondary cities. Similarly, the project will prove to JNV/BEV that the associated costs of doing large housing programs (for example, in terms of institutional and land costs) can be substantially lower in secondary cities than in the large metropolitan areas.

3. Impact on Beneficiaries Standard of Living

While providing better shelter to low income groups in Ecuador's secondary cities, the project also aims at improving the social fabric of those communities. As reflected in the evaluation of previous low income housing projects, the most dramatic impact shall be made on the beneficiaries' level of living. In terms of living space, for example, the previous dwellings they occupied were probably overcrowded one room units, with toilets and water faucets shared with several other families. The new solutions will offer those services plus electricity under one household roof. To those who cannot afford even a basic unit, the project will offer opportunities for improvement or a serviced lot on which they can progressively develop a unit. Additionally, many beneficiaries will become homeowners. While some or most beneficiaries may not perceive housing mortgages payments as a form of equity-building - but rather of family satisfaction - home ownership should account for increased family stability.

While the beneficiaries will be required, at least initially, to allocate some 25 percent of their incomes to mortgage payments, experience shows that families are willing to spend even more in trying to finish and expand their dwellings, in the form of walls, terraces, extra bedrooms, paint, and exterior decoration.[3]

To these material gains, the benefits for family life should be added. Improved living environments, according to previous JNV and USAID research such as in Quito's Tarqui community, seem to result in greater permanence of children in the family, an objective of Ecuador's expanded

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3/ Ibid.

family system. Women heads-of-household, once becoming homeowners, seem to consider the houses a means of securing more stable family conditions. To the families, the ownership of houses provides access to credit, a situation previously unattainable, for purposes of emergencies or for new economic activity.

4. Project Externalities

The project will bring about significant improvements in community welfare. The housing deficit, and thus the need to replace crowded, unsafe units, will be reduced by the approximately 14,600 units. The construction of some 2,000 units in cities like Cuenca or Ambato, for example, could easily serve to replace all of the "unfit" units as identified in Ecuador's latest (1974) housing census. Additionally, the urban layout and design should reduce the danger of contaminated water running through the streets or of pools of standing water which, on the coast, are breeding grounds for mosquitos and other undesirable things. Individual and community status should also be improved, in terms of easier access to community facilities such as schools, markets, and churches, which will be incorporated in the layout of large housing developments. This is crucial to the extent that, in previous housing projects evaluations made in Ecuador, at least 15 percent of the new (rural) homeowners declared that the primary reason for moving to new quarters was "the increased access to schooling for the children".4/

Experience also shows that low income housing projects bring about new forms of economic activity. Small retail operations, child care services, and other small enterprises are likely to be undertaken as new sources of employment and income. While there is little comparative information for Ecuador's secondary cities, data from Quito and other large cities suggest that two or three of every ten households are likely to set up businesses in the units, particularly in the form of neighborhood tiendas.

Housing construction is a form of investment which, directly and through the multiplier effect, should bring new sources of employment and of private enterprise activity. The need for supplies of construction materials and parts for the units in most of Ecuador's smaller cities should also generate new forms of employment and income which can last even after completion of the project, with the added posibilities that the beneficiaries themselves, in the form of cooperatives, could share from these increased economic opportunities.

Following an approximation suggested through research in the construction sector of developing countries, USAID estimates that the construction process will result in the creation of some 77,300 man/months of employment, which is to say that some 2,600 men shall have a permanent source of

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4/ UN, "Evaluation of the Binational Housing Demonstration Project in Colombia and Ecuador", New York, 1977.

employment in the construction sector of Ecuador's secondary cities during the life of the project.[5]

Finally, it should be pointed out that improved living conditions combined with other opportunities for jobs and education in Ecuador's secondary cities will work to curb the step-wise migration from small towns into Quito and Guayaquil. This should result in social as well as in economic benefits.

D. Financial Analysis

In response to the GOE's new housing sector priorities, BEV has rapidly expanded its portfolio and solidified its position as a strong financial institution. Although profitability has dropped in recent years, BEV has responded with significant interest rate adjustments. The HG loan funds provided by this project will reinforce the interest rate policy to improve profitability and further strengthen BEV over the coming years.

Condensed comparative balance sheets for BEV for 1978 and 1981 are presented in Table IV.3. (A detailed balance sheet is presented in Annex VI.A.) Total assets over the four-year period increased S/5,910 million or 91 percent. The principal asset increase was in fixed assets/investments which are primarily represented by construction in progress. The increase in assets was primarily financed by an increase in equity and long-term debt. Although the GOE has continued its priority financial contribution to housing, the expansion of BEV activities have made the GOE's budget contribution to the BEV's equity a relatively smaller part of total BEV resources. Most of BEV's current expansion is being financed by debt: to the social security system, Ecuadorean Development Bank, IBRD, and A.I.D. As a result, long-term debt increased by S/3,099 million or 407 percent from 1978 to 1981. Nevertheless, BEV's current position remains strong with a relatively conservative debt to equity rate of 2.1. Working capital and liquidity have been maintained at adequate levels in relation to investment volumes and loan repayments in arrears are at an acceptable level of three percent of collectibles.

The profitability of BEV rose steadily through the 1970s, with the return on equity reaching 9.5 percent in 1979. However, BEV experienced a sharp drop in profitability during 1980 with a return on equity of one percent and a loss during 1981 representing a negative return on equity of 8.1 percent. This was due to (1) substantial increases in wage rates, (2) a portfolio of long-term low interest rate loans at a time when the cost of resources rose, and (3) a dramatic increase in the value of work in progress at the end of 1981 due to delays in the final sales of two large housing projects, one in Quito and one in Guayaquil. The latter factor is expected to

5/ Estimates derived from the methodology precented in: Strassman, Paul, "Guidelines for Estimating Employment Generation Through Shelter Sector Assistance", Michigan State University, January, 1980.contribute to a smaller loss in 1982 as well. Losses are not expected to continue in 1983, however, as these units will be sold and begin contributing to income.

Table IV.3

BEV Comparative Balance Sheet
(Millions of Sucres)

Assets	1978	1981	Change	Percent Increase
Current Assets	622	1,757	1,135	182
Loans Receivable	3,143	4,645	1,502	48
Fixed Assets/ Investments	2,329	5,364	3,035	130
Other	421	659	238	57
Total	6,515	12,425	5,910	91
Liabilities				
Current Liabilities	201	446	245	122
Deposits	2,049	2,557	508	25
Bonds	691	789	98	14
Long Term Debt	761	3,860	3,099	407
Other	145	827	682	470
Total	3,847	8,479	4,632	120
Capital and Reserves	2,688	3,946	1,278	48
Grand Total	6,515	12,425	5,910	91
Current Ratio	3.1	3.9		
Debt: Equity	1.4	2.1		
Return of Equity	9.3	(8.1)		

Constraints on GOE budget allocations and increased reliance on debt financing have compelled the BEV to raise interest rates and to adopt a policy of full cost recovery. During March 1981, BEV abandoned its 4-12 percent scale of interest rates and began charging 12 percent on all new loans. In February 1982, BEV resolved to charge 15 percent on subloans extended to beneficiaries under the A.I.D. Solanda Project (HG-005), the second IBRD housing loan, and other internally financed projects. Subloans under this proposed project would also be at 15 percent.

Moving from interest rates as low as four percent to 15 percent in one year is impressive. The new interest rate levels compare favorably with the estimated weighted average cost of resources of 6.7 percent for 1982 and 8.9 percent estimated for 1986 as detailed in Annex VI.C. Increased interest rates will enable BEV to return to profitability as projected in Annex IV.B. It is clear, however, that time is needed to enable BEV's loan portfolio to reflect the new interest rates. The immediate effect of HG-005 and the proposed loan will be to increase BEV's loan portfolio and investments by 9.5 percent over 1982 levels. This injection of resources combined with the very important element of a ten year grace period will allow the BEV to realize a projected return on equity of 9.6 for 1985 and 12.2 in 1991. This will help the BEV avoid decapitalization while interest on the portfolio adjusts towards market levels.

Besides increasing the mortgage interest rate to more closely reflect the cost of capital, BEV includes two important elements in its calculation of actual sales prices. First, the impact of inflation on construction costs is considered in calculating the unit costs. Second, indirect costs, calculated at 35 percent, include the closing costs to the beneficiaries. These calculations result in a sales price that not only is affordable by the target group, but also eliminates a subsidy and minimizes the risk of decapitalization to the BEV.

Detailed estimates of the project cash flow through BEV are found in Annex VI.D. These estimates reflect disbursement of the HG loan over three years (1983-85) and as mentioned above involve a cost to the BEV of 12 percent and a yield on investments of 15 percent. The cash flow projections make clear a highly positive flow during the ten years that are detailed. Because of the positive interest rate spread of three percent which will more than offset the BEV's increased administrative costs, the flow during the entire 25-year term will be positive.

The cash flow projections assumed 20-year terms for mortages and seven years for home improvement loans. In fact, mortgages may be let for up to 25 years and home improvement loans for up to ten years, though experience suggests that the beneficiaries prefer the shortest term possible within their capacity to pay. Revision of the projection based on the longer terms would, of course, reduce somewhat the highly positive cash flow.

On the other hand, it was conservatively assumed that 20 percent of project housing funds would be directed to home improvement loans. The relative demand for these types of loans could well be greater, given their lower cost, risk, and administrative complexity compared to the mortgage loans, as well as the popularity of progressive development of existing dwellings. The greater the share of project funding allocated to the shorter-term home improvement loans, the higher the surplus cash flow.

Finally, the cash flow projections assumed ten percent downpayments by the beneficiaries. Recent information from other JNV/BEV projects suggests that a 20 percent downpayment would be feasible. A reworking of the projections on this basis would further improve the project cash flow.

Thus, in reviewing the cash flow and balance sheet projects for BEV overall, including both HG-005 and HG-006 loans, positive results are evident.The loans do not raise the average debt-to-equity level above 2.6, a conservative level for a financial institutiuion. Furthermore, the higher rates to be paid by the BEV on the HG-006 resources (12 percent) do not raise the BEV's overall weighted cost of funds to unacceptable levels, leaving a considerable marging for changes in capital market terms without negatively affecting BEV opeations.

E. Social Soundness Analysis

This section summarizes the findings of the Social Soundness Analysis presented in Annex V. The Social Soundness Analysis addresses two related issues of socio-cultural feasibility: (1) affordability of and willingness to pay for the proposed housing solutions and (2) acceptability of the progressive type of housing solution to the target group.

1 Affordability and Willingness to Pay

The housing solutions proposed under the project are affordable to the target group according to the criterion that housing expenditures can not exceed 25 percent of family income. In fact, the project complies with studies made on the income situation in Ecuador, suggesting that the costs of units should not be greater than three times the annual household income[6/], a requirement that the solutions in this project would easily meet. Based on this 25 percent criterion, urban families with the median monthly income for areas outside of Quito and Guayaquil in 1981 (S/4300) can afford a housing solution which costs S/126,000 in 1983. Families at the 30th percentile (S/2880) could afford solutions which cost S/85,000. Comparing capacity to pay with the housing solutions to be financed under the project, the families with incomes between the 30th percentile and median will be eligible for piso-techo and core housing while families with incomes below the 30th percentile could acquire sites with services or home improvement loans.

The solutions offered under this project are estimated on the commonly recognized assumption that 25 percent of household income is a reasonable share to be assigned to housing payments. This indication of affordability does not take into account an additional important consideration. Mortgage payments have been estimated on a regular payment rather than on a variable payment method. This criteria of affordability does not contemplate any increase in family income which would consequently reduce the percentage of income used for housing. If the current rate of increase of the median income continues, households which at present have to allocate 25 percent of their incomes to the payment of their mortgages, would pay only 20 percent by the tenth year and 16 percent by the twentieth year.

6/ Rodrigo Ricaurte and Oscar Mena: "La Vivienda en el Ecuador", Quito, Mayo de 1978.

The willingness of low income families to pay up to 25 percent of their incomes to obtain housing is more difficult to demonstrate. However, the Social Soundness Analysis presented in Annex V indicates that households in small towns are willing to pay a greater amount of their income than are households in large urban areas and that this percentage probably exceeds 25 percent of family income. Based on this analysis USAID concludes that target group households will be willing to pay for the housing solutions offered under the project.

2. Acceptability of Progressively Developed Construction

Progressively developed construction, i.e., the provision of some minimum housing unit (sites and sevices, piso-techo, core housing) with the potential for expansion and quality improvements is an appropriate mechanism to provide housing to low income families which will have a high degree of acceptability to target group families for a variety of reasons. It mirrors the current pattern of self-help construction which take place in squatter settlements on the coast. It provides minimal shelter while providing the beneficiary families with an opportunity to expand and improve their housing in the way and at the rate which they desire and can afford. In particular, beneficiaries have ample opportunity to employ self-help techniques which significantly reduce not only the long-term debt burden but also cash outlays required to upgrade housing.

In sum, progressively developed construction is not only an acceptable option for providing housing to the target group families; it is the best alternative available to provide housing to lower income urban families.

F. Environmental Analysis

An Initial Environmental Examination (IEE), submitted to AID/W as a part of the PID, recommended a Negative Determination. The LAC Environmental officer concurred in that recommendation on April 1, 1981.

The project design anticipates that JNV/BEV headquarters will operate as an ICI in reviewing and approving low income housing subprojects presented by JNV Regional Offices. During the preparation of subprojects, potential environmental impacts will be identified and assessed. Criteria exist for ensuring that JNV/BEV headquaters will also review environmental impacts prior to the approval and funding of each subproject. A.I.D. technical advisors will assist JNV with these environmental reviews and, if necessary, call in TDY personnel as necessary. A condition precedent of the Implementation Agreement will require that JNV describe the environmental review process to be applied to the subprojects and give evidence that it has the staff resources to carry out such reviews.

Furthermore, USAID approval of each subproject financed under the HG loan will be required. At that time, each subproject will be reviewed against a JNV checklist of environmental considerations. The checklist will be developed jointly with USAID. If necessary, TDY assistance will be called on to review the checklist.

The home construction and infrastructure improvement activities financed under the project undoubtedly will bring about a significant improvement in the sanitary conditions of the low income beneficiaries. Simultaneously, the project will strengthen the JNV's abilities to work with local community organizations to maintain and further improve their living conditions. Decentralization of the planning and design process will permit greater familiarity with local conditions and therefore easier recognition of potentially sensitive environmental concerns. For example, increased use of local materials such as wood and bamboo will require that JNV examine sources in order to assure a reliable supply without harmful ecological effects on these renewable resources.

The close working relationships anticipated between the JNV Regional Offices and the various participating municipalities also will facilitate prompt identification and resolution of potential problems such as waste disposal. Because of their small scale and due to cost considerations, many of the subprojects will rely on latrines and septic tanks for waste disposal. In the secondary cities with municipal sewerage systems, it is expected that the subprojects would be provided a connection to the systems.

The long-term advisor to be contracted under the A.I.D. grant component will help sensitize the JNV's Regional Offices to environmental issues in their planning and design efforts. He will closely monitor the relationships between the Regional Offices and the participating municipalities to assure that both parties are in agreement about the impact of the proposed subprojects on the overall living conditions.

V. PROJECT IMPLEMENTATION

A. Project Disbursements and Timetable

Project disbursements will be scheduled over approximately three years. The early HG loan disbursements will be directed at initiation of infrastructure installation and will consist of a construction advance. Subsequent disbursements will be made on presentation of eligible mortgages. However, during the negotiation of the Implementation Agreement, consideration will be given to the possibility of financing mortgages already part of BEV's 1982 portfolio that meet the eligibility criteria.

The A.I.D. grant will be authorized by the USAID and will be incrementally funded with the first allotment scheduled for early FY 1983. Obligation for the PSC advisor will be made through the issuance of a direct USAID contract. Obligation for the design competition and the studies components may be done either through limited scope grant agreements or through direct USAID contracts, as appropriate. For example, the JNV and USAID may decide to seek third parties, such as the local architect societies, to manage the design competition. Individual grants could be issued directly to the several regional societies. Similarly, for the municipal studies component, individual direct contracts would be issued to Ecuadorean firms selected on a competitive basis. Alternatively, a local non-project study and investigation organization may be supported through a cooperative agreement to carry out one or more of these studies. Final decision on how best to arrange these obligations will be made once the project is underway.

The key events in project implementation are identified below.

Activity	Date
Project Authorization	August, 1982
JNV Regional Office Fully Staffed	September, 1982
Initial Grant Allotment ($75,000) Received by USAID	October, 1982
Implementation Agreement Negotiated and Signed	October, 1982
Long-term Advisor Contracted	November, 1982
First $5 million Subprojects Presented for USAID Approval	December, 1982
CP's to Seeking Investor Satisfied	January, 1983
Project Agreements Negotiated and Signed	March, 1983
First Design Competition Sponsored	April, 1983
First Municipal Study Contracted	August, 1983
Second Grant Increment ($125,000) Received by USAID	October, 1983
First Evaluation	November, 1983
Final Grant Increment ($100,000) Received by USAID	October, 1984
Second Evaluation	November, 1984
Project Drawdowns Completed	October, 1985
Final Evaluation	December, 1985

B. USAID Monitoring, Reports, and Evaluation

USAID's Office of Housing and Urban Development has recently been expanded. A U.S. PSC who previously worked with USAID/Paraguay has been added to the staff with housing office funds. Also, under the grant portion of the Solanda Project, two full-time PSC advisors, one U.S. and one Ecuadorean, have been hired to work on the community organization aspects. As indicated in the above timetable, the long-term advisor to be financed under the grant component of this secondary cities project will be brought on board as quickly as possible. Thus, even though the USAID's Housing and Urban Development Office has only one U.S. direct-hire position (i.e., the Office Chief), that individual will have staff adequate to manage this project, the ongoing Solanda HG project, and the development of future HGs.

Moreover, the office will be able to access additional resources. First, the grant portion of the Solanda project has funds that can be used for technical assistance and training as specific needs are determined. For example, some of these funds will be used to send JNV and BEV officials on observation trips to other nearby Latin American countries to collect information on progressive housing and community organization approaches. Short-term technical assistance on such aspects as innovative low cost construction materials, savings mobilization, environmental standards, etc., can also be financed. Second, USAID's Housing and Urban Development Office will continue to draw on backstopping services from RHO/Panama and from PRE/HUD. Already, a tentative use of up to $40,000 worth of consulting services to assist JNV develop a rural housing approach is planned.

Given this staffing plan and support, the USAID's HUD Office will be able to focus on the project's key institutional and policy objectives as well as the mechanics of disbursing the funds. These objectives will be monitored/promoted at two levels -- the JNV's Regional Offices and the JNV/BEV headquarters. The long-term Ecuadorean advisor to be contracted under the grant component will dedicate at least 50 percent of his time at the Regional/Office level. He will describe and explain the A.I.D. requirements; promote interaction between the Regional Offices, the municipalities and other developers; identify problems; promote local experimentation and innovation; and provide guidance on the development and use of a reporting system. The U.S. PSC advisor recently contracted with regional funding will be called on to help monitor the project as well. His past experience in home improvement activities will be particularly useful in expediting field work.

Based on this flow of information from the field and on his own inspections, USAID's HUD Chief will be able to call potential problem areas to the attention of JNV/BEV management. He will promote Quito-level coordination between JNV and other national entities such as BEDE and FODESUM. He will also be expected to follow the progress of the IBRD project and to coordinate with IBRD Housing Officer and advisors. In sum, he will manage the inputs as described in subsection III.D. above.

The JNV will present USAID with quarterly reports on progress status. These reports will be based on information received from the Regional Offices regarding subproject development and from BEV regarding the financial flow of funds.

There will be two regular annual evaluations and a final evaluation. These evaluations will be prepared jointly by USAID and JNV with assistance from RHO/PSA and/or AID/W. If necessary, short-term consulting services will be contracted using Solanda Project funds to assist with these evaluations. Each evaluation will assess the impact of the HG project on target populations as well as the achievement of the project's institutional development objectives regarding the strengthening of the GOE's low income housing delivery mechanism.

C. Conditions and Covenants

Prior to the seeking of an U.S. investor, USAID will require that the following conditions be met:

a. The JNV will present an administrative plan that sets out the delegation of authority by JNV headquarters to its Regional Offices and formalizes relationships between them.

b. The JNV will present a plan for the first year of operations. The plan will include for each Regional Office in which project activities will take place: specific site identification; the number and type of solutions to be built; the unit and total costs of each type of solution; the identification of the developers (i.e., municipalities, cooperatives, etc.) that will participate with the Regional Office; the financial plan indicating sources and uses of funds; and a subproject delivery plan including implementation and disbursement schedules.

c. The JNV will develop subprojects approved by USAID representing at least $5 million in investment needs.

d. The JNV and BEV will present evidence that they have necessary staff in place adequate to carry out the first year operating plans.

e. The JNV will present a plan for training JNV/BEV with emphasis on Regional Office needs. The plan will include a schedule for specific training sessions, identification of the scope and content of each session, and explanation of how the human and financial resources will be made available to carry out the plan.

f. BEV will present a copy of the agreement with the Ministry of Finance which describes the cost of the HG loan resources to BEV, the fact that the maintenance of value which will be borne by the Ministry, and the terms for repayment of the funds.

g. JNV will present a plan and schedule for obtaining technical assistance and other A.I.D. grant funded support adequate to assure the timely completion of the project.

In addition, the Implementation Agreement will contain the following convenants:

a. Disbursements after the first advance will be made on the basis of execution of loans/mortgages in subprojects approved by A.I.D. and the presentation of an updated delivery plan. Liquidation of the advance will be made gradually with completed loans/mortgages so that at the time of the last disbursement of $25 million all the advance will be represented by completed loans/mortgages.

b. The proceeds of the loan as well the additional funds generated by their recuperation after compliance with the obligations to the investor will be used for the sole purpose of financing shelter solutions provided hereunder for low income families earning below the established median income level for urban areas outside of Quito and Guayaquil.

c. At least 30 percent of the project resources will be used to finance subprojects in which other developers will participate with the JNV/BEV in some significant aspect such as the donation of land, the elaboration of subproject design documents, assistance in community development and loan recuperation, or others.

d. Sufficient resources will be made available by BEV to assure that adequate staff and support levels are maintained to carry out this project.

e. Project resources will be lent at no less than 15 percent interest rate that will assure the cost recuperation of the investment and the strengthening of the BEV to continue to finance low income family shelter programs.

f. The BEV will provide at least 25 percent of all loans financed under this project using its own resources.

SECONDARY CITIES LOW INCOME HOUSING

PROJECT PAPER ANNEXES

I. Standard Annexes

- A. Application Letter
- B. Statutory Checklist
- C. Draft Guaranty Authorization
- D. PID Guidance Cable
- E. Initial Environmental Examination
- F. Project Checklist (for grant component)

II. Logical Framework

III. Project Design Details

- A. Indices of Housing and Services Characteristics in Secondary Cities
- B. Map of Regional Growth Poles
- C. Description of Illustrative Subprojects

IV. JNV/BEV Organization and Staffing

V. Social Soundness Analysis

VI. Financial Exhibits

- A. Projected Balance Sheet of BEV
- B. Projected Income Statement of BEV
- C. Weighted Average Cost of Resources of BEV
- D. Project Cash Flow Projection
- E. Cost Estimates for A.I.D. Grant Funded Activities

MINISTERIO DE FINANZAS
Subsecretaría de Presupuesto
y Crédito Público

Oficio No. SP-82- **3047**

Quito, a 25 MAYO 1982

Señor
John A. Sanbrailo
DIRECTOR DE LA MISION DE AID EN ECUADOR
Av. Colombia 1573 y Queseras del Medio
Quito.-

NO REPLY NEEDED
REPLIED BY
ON
Date Initials

Señor Director:

A solicitud del Gobierno del Ecuador, durante los últimos meses, varios organismos y agencias gubernamentales han venido desarrollando con técnicos de la Agencia para el Desarrollo Internacional (AID) algunos proyectos ecuatorianos de desarrollo que requerirán de financiamiento mediante préstamos de la AID en el año de 1982. La presente tiene por objeto ratificar el interés del Gobierno Nacional en recibir préstamos blandos de la AID, tan pronto como sea posible para los siguientes proyectos:

- El Consejo Nacional de Ciencia y Tecnología (CONACYT) ha desarrollado un Proyecto de Transferencia de Tecnología Rural que requerirá un préstamo blando de la AID por el monto de 5.0 millones de dólares. Este préstamo contribuirá a fortalecer el CONACYT como institución y a financiar los proyectos que CONACYT llevará a cabo con entidades tales como el MAG, INIAP, INERHI, INEC, universidades ecuatorianas, etc. Tenemos entendido que los términos de estos préstamos para el Gobierno del Ecuador serán los siguientes: 25 años plazo; 10 años de período de gracia; y una tasa de interés del 2 por ciento durante el período de gracia y del 3 por ciento de ahí en adelante.

- El Programa Nacional de Forestación (PNF) del Ministerio de Agricultura ha diseñado un proyecto tendiente a incrementar las actividades del Gobierno del Ecuador en las áreas de forestación, de conservación y de recursos naturales, con especial énfasis en el desarrollo de recursos forestales productivos. Este proyecto requerirá un préstamo blando de la AID de 6.0 millones de dólares, más fondos no reembolsables en un monto de 1.0 millones de dólares. Este proyecto será implementado a través del PNF y de otras entidades ecuatorianas tales como EMDEFOR. Los términos del préstamo blando al Gobierno del Ecuador entendemos serán iguales a los del Proyecto con CONACYT.

- La Junta Nacional de la Vivienda (JNV) y el Banco Ecuatoriano de la Vivienda (BEV) han diseñado un proyecto para incrementar la disponibilidad de viviendas de interés social en

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MINISTERIO DE FINANZAS
Subsecretaría de Presupuesto
y Crédito Público

Oficio No. SP-82- 3047

Quito, a 25 MAYO 1982

ciudades secundarias y en pueblos pequeños, fuera de Quito y Guayaquil. Este proyecto proveerá financiamiento para soluciones habitacionales tales como lotes y servicios, piso techo y vivienda mínima, para familias de bajos ingresos. Entendemos que este proyecto califica para el Programa de Garantías de Inversión para la vivienda de la AID, programa este mediante el cual la AID puede garantizar un préstamo de un inversionista privado de los Estados Unidos de hasta 25.0 millones de dólares, de modo que los términos y condiciones del préstamo puedan ser más beneficiosos para el Gobierno del Ecuador. Con las garantías de AID, entendemos que dichos términos y condiciones podrían ser los siguientes: 30 años de plazo con un período de gracia de 10 años; del mismo modo entendemos que la AID está buscando los medios para obtener fondos no reembolsables para complementar las actividades de este proyecto.

A fin de tener la seguridad de que los fondos de AID estarán disponibles para estos proyectos, entendemos que el Convenio para el Proyecto de CONACYT debería ser firmado hasta el 30 de junio de 1982, y el Convenio para el Proyecto de Forestación hasta el 30 de agosto de 1982. Del mismo modo sería conveniente finiquitar el convenio de instrumentación para el proyecto de garantía de inversión para vivienda de ciudades secundarias hasta el 30 de septiembre de 1982.

Atentamente,
DIOS, PATRIA Y LIBERTAD,

Jaime Morillo Batlle,
MINISTRO DE FINANZAS Y CREDITO PUBLICO.

JC-2

JUNTA NACIONAL DE LA VIVIENDA

-3 JUN. 1982

0656

ACTION: UDI-2

REPLY DUE 6/9

☐ NO REPLY NEEDED

☐ REPLIED BY

ON

Date

Señor
John Sanbrailo
DIRECTOR, AGENCIA INTERNACIONAL DE
DESARROLLO (A.I.D.)
Presente.-

De mis consideraciones:

En relación con la reunión que sostuvimos el 27 de mayo pasado con Ud, y otros personeros de la AID, respecto a un "Programa Habitacional para ciudades secundarias del Ecuador", según consta en el "Resumen Propuesta de Programa de la Junta Nacional de la Vivienda (JNV) y la Agencia para el Desarrollo Internacional (A.I.D.)", me permito indicarle lo siguiente:

1. El Programa se inserta dentro de los objetivos contemplados tanto por el Programa de Vivienda como el Programa de Desarrollo Urbano, establecidos en el "Plan Nacional de Desarrollo 1980-1984", ya que los proyectos específicos derivados del mismo, coadyuvarían por medio de las soluciones habitacionales que se plantea, a resolver el problema de alojamiento de los sectores sociales más necesitados en ese tipo de ciudades y al mismo tiempo dinamizaría su base económica, generando empleo y produciendo demandas a los sectores productivos. En esta forma creemos que se ayudaría a crear nuevas posibilidades de ubicación a los excedentes poblacionales del país, que están buscando alternativas para su asentamiento.

2. Los tipos de solución habitacional que se pretende llevar a cabo, caen dentro de la decisión institucional de atender la demanda de los sectores mayoritarios de más bajo ingreso, los cuales han sido desatendidos en épocas pasadas, en particular aquellos cuyo ingreso familiar cae por debajo de la mediana que se ha proyectado para los centros urbanos del Ecuador, incluyendo a Quito y Guayaquil.

Finalmente, estamos de acuerdo en el Plan Financiero estipulado en el citado Resúmen. En vista de la concordancia de criterios establecido sobre todos los puntos anteriores, le ruego estudiar conjuntamente con nosotros los pasos subsecuentes re

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queridos para formalizar la concesión del Préstamo y realizar el diseño de las acciones pertinentes a cada proyecto específico.

Sin otro particular por el momento, aprovecho la ocasión para presentarle los sentimientos de mi alta consideración y estima.

Atentamente,

Arq. Ricardo Dávalos C.
PRESIDENTE DE LA JNV/BEV.

THE HOUSING GUARANTY PROGRAM

STATUTORY CHECKLIST

ECUADOR

PROJECT NO. 518-HG-006

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?

(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 to 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; 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?

No

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	Yes
(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?	Yes
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?	Not Applicable
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?	Yes
(2) Will the proposed Housing Guaranty demonstrate the feasibility of particular kinds of housing and other institutional arrangements?	Yes

I-B

(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

7-C

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

AGENCY FOR INTERNATIONAL DEVELOPMENT

WASHINGTON D.C. 20523

ASSISTANT ADMINISTRATOR

GUARANTY AUTHORIZATION

PROJECT NO. 518-HG-006

PROVIDED FROM: Housing Guaranty Authority

FOR : The Government of Ecuador

Pursuant to the authority vested in the Assistant Administrator, Bureau for Latin America and the Caribbean, by the Foreign Assistance act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance of guaranties pursuant to Section 222 of the FAA of not to exceed Twenty-five Million Dollars ($25,000,000) 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 Ecuador.

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

1. Term of Guaranty: The loans may extend for a period of up to thirty years (30) from the date of disbursement and may include such terms and conditions as shall be acceptable to A.I.D. The guaranties of the loans shall extend for a period beginning with disbursements of the loans and shall continue until such time as the Investor has been paid in full pursuant to the terms of the loans.

2. Interest Rate: The rate of interest payable to the Investor pursuant to the loans shall not exceed the allowable rate of interest prescribed pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans made in the long term U.S. capital markets.

3. Government of Ecuador Guaranty: The Government of Ecuador shall provide for a full faith and credit guaranty to indemnify A.I.D. against all losses arising by virtue of A.I.D.'s guaranties to the Investor or from non-payment of the guaranty fee.

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

5. Other Terms and Conditions: The guaranties shall be subject to such other terms and conditions as A.I.D. may deem necessary.

Otto Reich
Assistant Administrator
Bureau for Latin America and the Caribbean

Clearances:
PRE/HUD:JHansen________ Date__________
GC/HUD:MWilliams________ Date__________
LAC/DR:DJohnson________ Date__________
GC/LAC:BVeret________ Date__________
FM/LD:ESOwens________ Date__________

GC/H:MJWILLIAMS:prj:07/26/82

BEST AVAILABLE DOCUMENT

HC-006

ACTION/INFO
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TAGS:

SUBJECT: DAEC REVIEW - INTEGRATED SHELTER - SECONDARY CITIES PID

1. THE DAEC REVIEWED AND APPROVED SUBJECT PID ON MARCH 15, 1981. THE MISSION SHOULD PROCEED WITH DEVELOPMENT OF THE PP TO BE SUBMITTED FOR AID/W REVIEW AND APPROVAL.

2. THE FOLLOWING ISSUES SHOULD BE ADDRESSED IN THE PP:

A) PROJECT STRATEGY: THE PP SHOULD CLARIFY STRATEGY CONCERNS SPECIFICALLY WITH RESPECT TO: 1) HOW "INTEGRATED" VERSUS "COORDINATED" THIS PROJECT IS IN EACH OF THE DIFFERENT TARGET AREAS. FOR EXAMPLE, IN SECONDARY CITIES, THE SOLANDA APPROACH IS TO BE REPLICATED SUGGESTING A COORDINATED, RATHER THAN INTEGRATED, EFFORT. WHEREAS, IN THE RURAL AREA", DELIVERY OF HOUSING SOLUTIONS IS TO BE INTEGRATED IN THE WHOLE IRD STRATEGY, COMPLEMENTING THE DELIVERY OF OTHER SOCIAL SERVICES SUCH AS HEALTHAND EDUCATION. THESE TERMS NEED TO BE DEFINED SINCE THEY MEAN DIFFERENT THINGS IN THE DIFFERENT TARGET AREAS AND HOW EACH IS TOBE ACCOMPLISHED SHOULD BE SPELLED OUT; 2) THE ROLE OF THE IRD SECRETARIAT AND ITS RELATIONSHIP TO THE ECUADORIAN HOUSING BANK (BEV) AND NATIONAL HOUSING BOARD (JNV); 3) THE MAGNITUDE AND ALLOCATION OF PROJECT INPUTS AND OUTPUTS AMONG SECONDARY CITIES, MARKET TOWNS AND RURAL AREAS, SPECIFICALLY ADDRESSING INPUTS AND OUTPUTS IN THE AREA OF INSTITUTIONAL DEVELOPMENT.

B) COORDINATION WITH IBRD PROJECT: THE PP SHOULD CLEARLY DESCRIBE HOW THE IBRD'S SECONDARY CITIES PROJECT WILL COMPLEMENT, RATHER THAN DUPLICATE, AID'S PROJECT IN TERMS OF GEOGRAPHIC FOCUS. IT WAS SUGGESTED, SINCE THE IBRD IS WORKING ONLY IN SECONDARY CITIES, THAT AID GIVE EMPHASIS TO MARKET TOWNS AND RURAL AREAS. WHILE NOT SPECIFICALLY DISCUSSED AT DAEC ASSUMPTION WAS THAT ANY ACTIVITY IN SECONDARY CITIES, UNDER THIS PROJECT WOULD NOT. REPEAT, NOT TAKE PLACE IN ANY SECONDARY CITY INCLUDED IN IBRD PROGRAM.

C) GOE COMMITMENT AND PROJECT REPLICABILITY: THE PP SHOULD DISCUSS THE PRESENT ACTIVITIES AND FUTURE PLANS OF THE GOE FOR THE PROVISION OF HOUSING SOLUTIONS IN EACH OF THE TARGET AREAS. BASED ON THESE PROGRAMS AND WHAT THE MISSION FEELS IS REALISTIC ON THE PART OF THE GOE, THE PP SHOULD EXPLAIN WHY WE CAN EXPECT CONTINUING GOE WILLINGNESS TO ALLOCATE RESOURCES TO HOUSING, IN GENERAL, AND THE TARGET AREAS, IN PARTICULAR. STRONG GOE COMMITMENT IS PARTICULARLY IMPORTANT SINCE IT IS QUESTIONABLE WHETHER THIS PROJECT COULD BE REPLICATED NATIONWIDE GIVEN A FIXED NEGATIVE REAL RATE OF INTEREST AT 11 PERCENT, ANTICIPATED HIGH RATES OF BORROWER DEFAULT AND COSTLY OVERHEAD EXPENSES CHARACTERISTIC OF RURAL HOUSING PROGRAMS IN GENERAL. ALL OF THESE FACTORS POINT TO [illegible] SUBSIDIZATION OF THIS PROJECT AND [illegible] SIMILAR EFFORTS BEYOND THE LIFE

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OF THE PROJECT. THE PP SHOULD INDICATE THE MAGNITUDE OF THE ANTICIPATED SUBSIDY AND WHETHER THE GOE CAN AFFORD IT. MEASURES TO SEEK AN INTEREST RATE GREATER THAN 12 PERCENT SHOULD ALSO BE DISCUSSED.

D) PROJECT DESIGN: A NUMBER OF DESIGN QUESTIONS NEED TO BE ADDRESSED IN THE PP. THESE ISSUES ARE: 1) DOES IT MAKE SENSE, BASED ON THE RESULTS OF THE DETAILED DEMAND AND AFFORDABILITY STUDIES TO BE UNDERTAKEN DURING THE INTENSIVE REVIEW, TO CONSTRUCT "NEW UNITS" IN THE RURAL AREAS? - 2) BASED ON WHAT CRITERIA WILL SHELTER SOLUTION LOANS BE AWARDED TO BENEFICIARIES? 3) THROUGH WHAT MECHANISM(S) WILL CREDIT BE DISTRIBUTED AND LOAN REPAYMENTS COLLECTED? 4) WHAT EFFECT WILL DEFAULTS ON THESE LOANS HAVE ON THE ELIGIBILITY OF BENEFICIARIES TO BORROW FROM OTHER CREDIT SOURCES?5) THEINSTITUTIONALANALYSIS SHOULD FOCUSNOT ONLY ON NATIONAL INSTITUTIONS SUCH AS THE BEV AND JNV, BUT

ALSO LOCAL ORGANIZATIONS THAT WILL FUNCTION AS DEVELOPERS OF THE VARIOUS PROJECTS. WHAT ARE THE CAPABILITIES OF THESE ORGANIZATIONS TO CARRY OUT DEVELOPER ACTIVITIES IN THE DIFFERENT TARGET AREAS?

E) PROJECT FUNDING: DUE TO LIMITATIONS ON THE HG AUTHORITY, A MAXIMUM OF 15 MILLION DOLS CAN BE AUTHORIZED DURING FY 81. THE BALANCE OF HG FUNDING PROPOSED FOR THIS PROJECT WILL HAVE TO BE AUTHORIZED IN A SUBSEQUENT FISCAL YEAR. FURTHERMORE, BECAUSE OF CUTS IN THE TOTAL AMOUNT OF IIPUP FUNDS AVAILABLE DURING FY 81 AND 82, NO IIPUP FUNDS WILL BE MADE AVAILABLE TO FUND TA UNDER SUBJECT HG. THE MISSION MUST EXPLORE ALTERNATIVES TO FINANCE TA. DURING THE DAEC, IT WAS SUGGESTED THAT THE FOLLOWING POTENTIAL FUNDING SOURCES BE CONSIDERED: (1) GRANT FUNDS UNDER THE IRD PROJECT, (2) GRANT FUNDS FROM APPROPRIATION ACCOUNTS (PERHAPS AG, RD&N) OTHER THAN THE SDA ACCOUNT, WHICH HAS THE LEAST GRANT MONIES AVAILABLE; (3) HG FUNDS; (4) FCH INSTITUTIONAL SUPPORT GRANT FOR TECHNICAL ASSISTANCE TO COOPERATIVE ORGANIZATIONS IN THE PROJECT AREAS.

3. LAC/DR ENVIRONMENTAL OFFICER IS REVIEWING REVISED IEE RECEIVED MARCH 31, 1981. SEPTEL WILL FOLLOW. HAIG
BT
#1984

RESPONSES TO PID GUIDANCE CABLE

2.A. Project Strategy

(1) Integrated Approach - Subprojects will only follow the Solanda "model" when there exist opportunities to draw heavily on other organizations for complementary development efforts. In all cases, however, new construction subprojects will be closely coordinated with local municipalities to fit within an urban development context. (See IV.A.1.)

(2) Role of IRDS - The rural housing component has been eliminated from the project design. However, during the course of project implementation USAID will call on PRE/HUD for short-term consulting services to assist JNV resolve technical concerns about a rural housing program. It is anticipated that JNV will call on the IRD Secretariat for analytic inputs as necessary in the development of such a program. (See IV.A.1.)

2.B. Coordination with IBRD Project - See Issue 1 of the Summary and Recommendation as well as the detailed discussion of the IBRD projects (see II.E.2.) and the criteria for geographic selection of subprojects (see III.A.4.).

2.C. GOE Commitment and Project Replicability - As described in II.D.2., the GOE has combined its commitment to improved housing for low income families in secondary cities with a policy of decreasing subsidization to ensure that national housing needs are fully met. The key elements of this policy include: an increased interest rate on BEV loans (see IV.D.), reduced unit costs through the use of local materials and progressive construction approaches (see IV.A.2.), and the mobilization of complementary resources such as land, infrastructure, and community services and organization from municipalities and other local development agencies (see IV.B.). This project will reinforce the implementation of these resources by JNV/BEV, thereby promoting project replicability.

2.D. Project Design

(1) A mix of solutions ranging from home improvement loans and urbanized lots with sanitary cores to piso-techo and enclosed core units will be tailored for each subproject site based on careful analysis of the beneficiaries' needs and capacities to pay. Preliminary analysis indicates that all of these solutions are affordable to households below the national

median income and to the majority of households in secondary cities. (See IV.A. and Annex V.)

(2) Subproject areas will be selected in accordance with criteria outlined in II.A.4. Within each area, the mix of solutions will be based on the actual needs and capacity to pay of the target group. Beneficiary households will be required to have incomes below the national median outside of Quito and Guayaquil and to meet other criteria similar to those now used by the JNV for its home improvement loan programs.

(3) Home improvement loans and mortgages will be transacted through the BEV's several branch offices and agencies (see IV.B.). An important project objective is to facilitate repayments through the establishment of convenient collection points such as municipal offices, community centers, and cooperative offices (see III.C.).

(4) BEV is currently experiencing a three percent delinquency rate on its portfolio. The actual default rate is even lower. This excellent record is expected to be sustained if not improved as a result of several innovations introduced under this project. First, the design and mix of low income solutions will be geared to the beneficiaries' capacities to pay. Second, BEV will expand its collection machanisms to provide more convenient access for project clientele in secondary cities and smaller towns. Finally, repayments schedules will be flexible to accommodate the irregular income flows that are common outside of the major urban/industrial areas.

(5) The project seeks to transfer to secondary cities an urban development model currently being demonstrated in Quito and Guayaquil. This model involves the coordinated participation of local organizations (municipal governments, cooperatives, private enterprise) for the development and construction of low income housing projects under the direction of the JNV Regional Offices. (See IV.B.4.). Under the sector loan approach, the institutional capacities of each participating entity will be reviewed at the time of subproject approval.

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

LAC/DR-IEE-81-16

ENVIRONMENTAL THRESHOLD DECISION

Project Location	:	Ecuador
Project Title and Number	:	Integrated Shelter Delivery for Secondary Cities, Market Towns, and Rural Areas (518-HG-006)
Funding	:	FY 1981: Housing Guaranty Loan $25 million Grants - $ 0.1 million FY 1982: Grants - $ 0.4 million GOE - $14.6 million
Life of Project	:	Five years
Recommended Threshold Decision	:	Negative Determination
IEE Prepared by	:	John Miller, Housing Officer
Bureau Threshold Decision	:	Concurrence with Mission Recommendation
Action	:	1) Copy to USAID/Ecuador John A. Sanbrailo 2) John Miller 3) Raj Chanda, DS/H 4) Mario Pita, RHO/PSA 5) IEE file

Robert O. Otto Date April 1, 1981

Robert O. Otto
Chief Environmental Officer
Bureau for Latin America
and the Caribbean

INITIAL ENVIRONMENTAL EXAMINATION
THRESHOLD DECISION

Project Location: Ecuador

Project Title: Integrated Shelter Delivery for Secondary Cities, Market Towns, and Rural Areas (518-HG-006)

Funding:
FY 1981: Housing Guaranty loan - $25 million
Grants - $ 0.1 million

FY 1982: Grants - $ 0.4 million
GOE - $14.6 million

IEE Prepared by: John Miller, Housing Officer
November, 1980

Enviornmental Action Recommended: The USAID Project Committee has undertaken an Initial Environmental Examination of the potential impacts of the proposed Program and has arrived at a recommendation of a Negative Determination. No adverse environmental impacts are anticipated. The key environmental issues identified in the attached Impact Form and discussed below will be further analyzed in the project preparation. Technical and administrative responses to these issues will be presented in the technical section of the Project Paper.

Mission Director's Concurrence:

John A. Sanbrailo
Director
USAID/Ecuador

March 26, 1981

Note: This IEE is submitted in conjunction with the PID, reviewed by LAC on March 19, 1981.

I. PROJECT DESCRIPTION

This Program will finance nearly 7,000 shelter solutions ranging from core units in secondary cities and smaller towns to home improvement credit in towns and dispersed rural areas. Project activities will be carried out in the Coastal Province of Manabí and the Central Sierra. The project purpose is to assist the Government of Ecuador to create an outreach system for the delivery of shelter solutions tailored to the paying capacities of the poor in priority secondary cities, market towns, and rural areas and to promote linkages that integrate these activities with other ongoing GOE development programs.

The following selected portions of the PID describe the Program.

A. Program Components

1. Locations

As currently planned, the Program proposed in this PID will be implemented in two distinct geographic regions of the country: (1) the central Sierra including the Provinces of Chimborazo, Cotopaxi and Tungurahua, and (2) the coastal Province of Manabí. The GOE, through CONADE, has placed priority on these regions for national investments due to their large rural poverty population, extensive out-migration, and the shelter problems and deficits found throughout these areas.

These two areas also contain six of the seventeen IRD projects included in the GOE's National Development Plan. Three of these IRD projects (Quimiag-Penipe, Chimborazo; Salcedo, Cotopaxi; Jipijapa, Manabí) are receiving A.I.D. funding. Two other IRD projects (Tungurahua and Puerto-Ila Chone, Manabí) are or will be receiving World Bank funding. And a sixth IRD project (Guamote, Chimborazo) will be funded with GOE resources. The Program proposed in this PID will provide funding for integrating a housing component into these IRD project areas. It will also direct low cost housing investments to secondary cities that support the development of rural areas of these IRD projects. Due to the distinct nature of the two regions (Manabí and the central Sierra), the GOE will gain experience applicable to the entire country not only in terms of different geographical and cultural conditions but also in terms of shelter requirements and solutions. During intensive review, additional locations related to other GOE IRD projects may also be considered.

2. Shelter Alternatives

Shelter and service "solutions" to each settlement level will vary due to size of population, need, affordability, cultural and geographic differences, etc., but the institutional arrangements in each will provide the model for similar GOE efforts in other geographic areas.

Nearly 7,000 shelter solutions ranging from core units in the secondary cities and smaller towns and home improvement credit in towns and dispersed rural areas are projected. Table 2 on the following page suggests quantities and costs of housing solutions by geographic region. New housing construction, which includes core and other progressively completed units, will be developed in projects from 50 units (in rural areas and market towns) to 500 units (in more urban areas), depending on local demand, institutional delivery mechanisms, availability of land, etc. Particular emphasis will be placed upon the best possible use of available, local building materials as a means of reducing shelter costs and as an example to the informal sector of how much such materials may be put to best use. This is an important element of the Program as local materials generally are available but not well utilized.

Home improvement programs will be of two types: those that present the possibility of neighborhood upgrading through the development of related infrastructure systems in coordination with improvements to units themselves, and those which are dispersed within a community and provide for more individualized improvements (e.g., new roofs, cement foundations, on-site water and sewer systems, etc.).

3. Institutional Outputs

In addition to physical shelter, certain coordination and institution building outputs are to take place.

a. Shelter delivery process. During implementation of the Program, the institutional arrangements being proposed here will be tested and adjustments will be made so a shelter delivery mechanism for the target areas can be established and function on a permanent basis.

b. Coordination with Regional and Local Development Activities. Since the shelter activities will be implemented in GOE priority areas, there will be coordination with other national investments made within local settings for schools, markets, other community facilities, and infrastructure, as well as other large investments to create jobs through an improved agricultural and industrial infrastructure. This coordination will be a key instrument to help consolidate the integrated approach to solve the problems of the poor in the target areas.

c. Community Development and Organization. Although the elements of community organization exist in most of the rural areas and market towns of the Sierra in the form of the minga, efforts will be made to reinforce and orient community development activities in shelter projects. The nature of the facilities and services that are needed to correspond to shelter improvement activities, and the type of participation and self-help activities that can be initiated by project

TABLE 2

PRELIMINARY SOLUTION ALLOCATION AND PROGRAM COSTS BY INCOME PERCENTILE, REGION, AND LOCATION TYPE

		CENTRAL SIERRA			COAST		
LOCATION/ SOLUTION TYPE	INC. PERC.	EST. SOL. COST ($)	No. OF UNITS	PROG. COST ($)	EST. SOL. COST ($)	No. OF UNITS	PROG. COST ($)
SECONDARY CITIES							
New Units	35	4747	500	2,373,500	5341	600	3,204,600
	25	4390	400	1,756,000	4985	500	2,492,500
	15	4035	400	1,614,000	4630	400	1,852,000
Sub-Total			1300	5,743,500		1500	7,549,100
Home improve.	5	2000	700	1,400,000	2000	500	1,000,000
Location Totals			2000	7,143,500		2000	8,549,100
MARKET TOWNS							
New Units	25	4390	150	685,000	4985	700	3,489,500
	15	4035	75	302,625	4630	500	2,315,000
Sub-Total			225	988,125		1200	5,804,500
Home improve.	5	2000	130	260,000	2000	600	1,200,000
Location Totals			355	1,248,125		1800	7,004,500
RURAL AREAS							
New Units	15	4035	300	1,210,500	4630	50	231,500
Home improve.	5	2000	300	600,000	2000	150	300,000
Location Totals			600	1,810,500		200	531,500
Grand Totals			2955	10,202,125		4000	16,085,100

NOTE: Cost estimates for new units are based upon the affordability data contained in Table 3, but for home improvements they are based upon what a normal package of improvements might cost. Affordability is based upon the assumed terms in Table 3. Since detailed income estimates for the specific program locations are very difficult to obtain, it was assumed that by dropping one decile category for each location type (e.g., from secondary cities to market towns) the lower incomes in less urbanized settings were accounted for. During the intensive review a more precise definition of the type of shelter solution that can be afforded will be made.

residents to produce those needed services and facilities as well as continued improvement of solutions will be identified in the Sierra and the Coast. In addition, using the A.I.D.'s Operation Program Grant (OPG) mechanism, selected community impact activities will be undertaken by local Private Voluntary Organizations (PVO) to be identified. They will stimulate and promote community organizations that (a) assist beneficiaries secure credit from existing sources for small scale enterprises, (b) foment the creation of community services such as day-care centers, and (c) provide the opportunity to reduce construction costs through self-help efforts and the purchase and use of low cost building materials. The Small Development Assistance (SDA) mechanism will also be drawn on to promote similar small-scale activities in rural communities.

B. Implementation Arrangements

1. Financial Entity

The BEV will be responsible for channeling the HG resources as well as generating counterpart funding to finance shelter activities. This will have the effect of expanding the BEV's mortgage portfolio and strengthening its financial base in conformance with National Development Plan guidelines.

2. Technical Project Coordinator

The JNV will assist in the design and construction of housing and physical infrstructure. Core staffs will be located in key secondary cities and travel to other sites in the region where shelter activities are to be carried out. The incentive for JNV to participate in the provision of technical assistance needed to develop projects will be to establish its operations beyond Guayaquil and Quito, to better fulfill the GOE mandate to decentralize service delivery, and to target services to the poor.

3. Developer Institutions

The developer will be responsible for packaging the projects by obtaining land, promoting specific projects, organizing community development activities, arranging for construction, and coordinating project activities with GOE agencies which complement the shelter development activities. Potential developers will be municipalities, local Private Voluntary Organizations, cooperatives, credit unions, the Rural Housing Unit of BEV, IRD coordinating groups, mutualistas, etc. Developers will be able to expand their constituencies, recapture investments in land, obtain experience in project development and establish a future role in shelter delivery. Where these developers are private institutions, the evolving GOE policy of encouraging private sector integration with national development priorities will be reinforced.

4. Public Sector Local and Regional Coordination

The municipalities will identify municipal growth areas, coordinate corresponding development and service activities, develop appropriate building standards and codes, and approve project plans. Regional development organizations (in particular, the Manabí Regional Rehabilitation Agency - CRM) will be brought into the process of developing shelter projects. Municipal and regional entities will gain by encouraging home ownership, providing incentives for residents to remain where they are, and reinforcing the process of planning, development, and coordination and the flow of information on the local and regional levels.

5. Public Sector National Coordination

This will involve the allocation of resources and coordination of programming at the national level through CONADE, the IRD Secretariat, the ministries responsible for service delivery, JNV/BEV, land reform, and other GOE entitities active in the target regions. The flow of information developed at this level from the program will be useful in linking investments in shelter with other public sector investments included in the National Development Plan.

6. Technical Assistance

Approximately US$500,000 in two long-term advisors and other short-term technical assistance will be provided. The long-term housing advisors will work principally with the JNV, regional agencies, and municipalities in the planning, coordination, and design of projects for two years. One advisor on the Coast and one in the Sierra will work with GOE agencies on a long-term basis to implement the shelter delivery process and to identify how GOE resources can be utilized to reinforce shelter and municipal development activities. (The experience gained through this assistance may contribute to the development of a possible new A.I.D. program in municipal administration.) Each long-term adviser will coordinate the following assistance: (a) short-term construction materials advisor to identify local materials to be used, develop techniques to employ those materials in project development, and prepare a manual on their utilization; (b) short-term assistance to develop techniques for promoting rural and market town shelter and the forms for collateralizing and repaying loans, given the nature of the agricultural cycle; (c) short-term assistance in environmental planning to develop techniques and standards to develop community level infrastructure; (d) short-term assistance in municipal and local planning, development, and financing; (e) training to allow the participating institutions to benefit from other experiences in Latin American countries in similar projects.

C. Financing

The program components and sources of financing, totaling

TABLE 3

PRELIMINARY PROGRAM SUMMARY AND FINANCIAL INPUTS

	Central Sierra and Coast	
	#	Cost ($)
Secondary Cities		
New Units	2,800	13,292,600
Home Improvements	1,200	2,400,000
Sub-Total	4,000	15,692,600
Market Towns		
New Units	1,425	6,792,625
Home Improvements	730	1,460,000
Sub-Total	2,155	8,252,625
Rural Areas		
New Units	350	1,442,000
Home Improvements	450	900,000
Sub-Total	800	2,342,000
GRAND TOTAL	6,955	26,287,225

13.7% inflation/3 years compounded, rounded	38,500,000
HG Share, 65% rounded	$25.0 million
BEV Share, 35% rounded	$13.5 million
Beneficiaries, 5% rounded	$ 1.1 million
Technical Assistance	$ .5 million

NOTE: The GOE counterpart share will be larger, probably greater than the HG loan itself, as the identified developmental activities (off-site infrastructure, community facilities and services) are planned and executed.

US$40.1 million, are summarized on Table 3 on the previous page. Housing construction and home improvements of US$39.6 million will be financed by the US$25 million HG, US$13.5 million from the BEV (representing 35 percent of the long term financing in mortgages and home improvement loans) and US$1.1 million from the beneficiaries (representing five percent downpayment for new units). The construction of off-site infrastructure and community facilities will be adapted to local solutions at project sites and will be financed by the GOE institutions (and IDB) already working in priority IRD areas. A total of US$0.5 million A.I.D. grant funds will finance institutional support activities in technical assistance and training.

II. DISCUSSION OF ENVIRONMENTAL IMPACTS

Several of the Program elements will have no environmental impact. These include home improvement loans and assistance in institutional mechanisms.

The Program will undertake small and medium-sized construction projects in several locations. In the absence of identified sites for such new construction projects, the analysis of the potential environmental impact is based on the design and implementation of similar projects in Ecuador. The potential for adverse environmental impact exists only in situations where land will be cleared and prepared for new construction. With reference to the Impact Identification and Evaluation Form, (III, following) the following potential impacts have been identified:

A. Land Use. The character of land (from 5 to 25 acres per project) will be changed in preparation for construction. This would, of course, foreclose other uses. Applying sound site selection criteria, however, will assure that other land uses as important as low cost housing will be considered.

The increased population of these areas - coming from crowded, unsanitary and deteriorating housing in nearby populated areas - will benefit not only from improved housing, but from previously unavailable physical and social infrastructure.

B. Water Quality. A system of potable water will be provided to the project. The use of existing water sources will be carefully reviewed in the context of their existing and future uses. In addition, if a water borne sewerage system is used, it will be designed so as not to pollute the waterways nor damage any existing system.

C. Atmospheric. The Program will cause no adverse environmental impact on air or noise.

D. Natural Resources. See B above.

E. Cultural. The Program will cause no adverse environmental impact on the culture.

F. Socioeconomic. The Program will have socioeconomic impacts to the extent that employment patterns of the target group may change as a result of improved housing in a serviced neighborhood.

Several aspects of the construction require special consideration. In particular, the following three items will be analyzed in Project Paper preparation, and solutions will be proposed that assure the environmental soundness of the subprojects.

1. Site selection for new housing construction must be based on criteria that effectively eliminate any negative impact on the land use and environmental systems of the area.

2. On new construction sites, low cost, effective alternatives for the provision of potable water and the disposal of waste water must be explored. Equally important to assure continued environmental soundness will be the effective operation and maintenance of the water and sewerage systems.

3. Preparation of a site for construction must include means to retain vegetation cover, permit adequate drainage, and prevent soil erosion.

Each potential site for construction will undergo an individual environmental evaluation as part of the technical review. Identified concerns will be addressed through site selection and site design criteria.

The Ecuadorean Institute of Public Works (IEOS), within the Ministry of Health, has explicit responsibility, nationwide, to assure environmental soundness in project planning and execution. As the cognizant GOE authority, IEOS provides site planning criteria and clearance for water and sewerage components of publically financed projects.

The following identifies IEOS' functions (unofficial translation of the law):

a) to work in close colaboration with local governments and other entities responsible for the provision of potable water and sewerage;

b) to coordinate the efforts of those entities and orient the execution of the works, technically designed to avoid the diffusion and waste of resources;

c) to prepare national, regional, and local plans of such service, in coordination with the National Development Board (CONADE);

d) to supervise the execution of the National Potable Water and Sewerage Program;

e) to undertake studies and construction through contracts with local governments and other entities involved in potable water and sewerage systems;

f) to provide technical assistance to local governments and other entities to undertake studies, planning, construction, and administration of potable water and sewerage services;

g) to coordinate and control foreign loans and loans with national institutions, in accordance with the laws in effect.

III. IMPACT IDENTIFICATION AND EVALUATION FORM

Impact Areas and Sub-areas	Impact Identification and Evaluation *
A. LAND USE	
1. Changing the character of the land through:	
a. Increasing the population	L
b. Extracting natural resources	N
c. Land clearing	M
d. Changing soil character	N
2. Altering natural defenses	M
3. Foreclosing important uses	M
4. Jeopardizing man or his works	N
B. WATER QUALITY	
1. Physical state of water	M
2. Chemical and biological states	L
3. Ecological balance	L
C. ATMOSPHERIC	
1. Air additives	N
2. Air pollution	N
3. Noise pollution	N
D. NATURAL RESOURCES	
1. Diversion, altered use of water	L
2. Irreversible, inefficient, commitments	N
E. CULTURAL	
1. Altering physical symbols	N
2. Dilution of cultural traditions	N
F. SOCIOECONOMIC	
1. Changes in economic/employment patterns	L
2. Change in population	L
3. Changes in cultural patterns	N

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* The following symbols are used :
N - No environmental impact
L - Little environmental impact
M - Moderate environmental impact
H - High environmental impact
U - Unknown environmental impact

Impact Areas and Sub-areas

G. HEALTH

1. Changing a natural environment. L
2. Eliminating an ecosystem element . . . . N

H. GENERAL

1. International impacts . . . . N
2. Controversial impacts . . . . N
3. Larger program impacts . . . . N

Prepared for Grant Component of Secondary Cities Low Income Housing HG Project

5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance Funds, B.2. applies to projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT? — Yes

A. GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act Sec. 523; FAA Sec. 634A; Sec. 653(b).

   (a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project; (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than $1 million over that amount)?

   (a) Not applicable for the Housing Guaranty. A substantive Notification will be submitted early in FY 1983 for the grant component.

   (b) Yes

2. FAA Sec. 611(a)(1). Prior to obligation in excess of $100,00, will there be

   2. (a) Yes, the PP contains appropriate plans;
   (b) Reasonably firm estimates of costs are presented in the PP.

(a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

3. No such action is required.

4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Lan Resources, dated October 25, 1973? (See AID Handbook 3 for new guidelines.)

4. Not applicable.

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?

5. Not applicable.

6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.

6. No. The project is tailored to meet specific institutional development needs of the JNV and will not encourage regional development programs.

7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

7. The project will foster private initiative and competition by encouraging private developers to present housing proposals for financing and by encouraging private architects to develop [illegible]w designs for low income housing. Housing cooperatives will be eligible for assistance under the HG loan component of the project. The technical efficiency of the home construction industry will be improved through the design innovation to be tested under the project.

8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

8. The HG loan component will encourage U.S. private investment in Ecuador. By facilitating the implementation of the HG loan, the grant component will indirectly encourage such investment.

9. FAA Sec. 612(b), 636(h); FY 1982 Appropriation Act Sec. 507. Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

9. Host country contributions are 35 percent of total project costs.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

10. No

11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

11. Yes

12. FY 1982 Appropriation Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

12. No assistance will be provided for any commodity for export.

13. FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16? Does

13. Yes

the project or program take into consideration the problem of the destruction of tropical forests?

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?

14. Not applicable.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and

1a. The project will promote the construction of low income housing in secondary cities and market towns. Construction will use labor intensive techniques and designs will incorporate the use of local materials and other appropriate technologies.

1b. Housing cooperatives will be eligible for assistance under the HG loan component. Participating cooperatives will receive technical assistance from JNV field offices.

otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

1c. Each housing solution financed under the project will require substantial self-help contributions from the benefitting family.

1d. Women as heads of households will be eligible to receive assistance from the project.

1e. Exchange of technical information with other Latin American countries will be encouraged.

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

b. Yes

c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

c. Yes. Incorporation of such innovations in low income housing is an objective of the project.

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activitiy with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

d. Yes. A host country contribution of 35 percent is planned.

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"? (M.O. 1232.1 defined a capital project as "the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than $100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character."

e. Not applicable.

f. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

f. The project will contribute to the development of key GOE housing sector institutions. In turn, their health, functioning and operation will contribute directly to the country's economic development.

g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage

g. The project responds directly to the housing sector needs identified in the National Development Plan. Technical assistance will be contracted from Ecuadorean sources to promote institutional development.

institutional development; and supports civil education and training in skills required for effective participation in governmental processes esential to self-government.

2. Development Assistance Project Criteria (Loans Only)

a. FAA Sec. 122(b) Information and conclusion on capacity of the country to repay the loan, at a reasonable rate of interest.

2a. Not applicable.

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

b. Not applicable.

c. ISDCA of 1981, Sec. 724 (c) and (d). If for Nicaragua, does the loan agreement require that the funds be used to the maximum extent possible for the private sector? Does the project provide for monitoring under FAA Sec. 624(g)?

c. Not applicable.

3. Economic Support Fund Project Criteria

a. FAA Sec. 531(a). Will this assistance promote economic or political

3a. Not applicable

stability? To the extent possible, does it reflect the policy directions of FAA Section 102?

b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities?

b. Not applicable.

c. FAA Sec. 534. Will ESF funds be used to finance the construction of the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives?

c. Not applicable.

d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

d. Not applicable.

5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

A1. Yes. All goods and services will be procured in accordance with applicable A.I.D. procedures which encourage small business participation.

2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him?

2. Yes

3. FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S. will commodities be insured in the United States against marine risk with such a company?

3. Ecuador does not discriminate against U.S. marine insurance companies.

4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be

4. Not applicable.

financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

5. FAA Sec. 604(g). Will construction or engineering services be procured from firms of countries otherwise eligible under Code 941 but which have attained a competitive capability in international markets in one or these areas?

5. Not applicable

6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent that such vessels are available at fair and reasonable rates?

6. No.

7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other

7. All technical assistance will be provided by private enterprise on an contract basis.

Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

8. International Air Transport. Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?

8. Yes

9. FY 1982 Appropriation Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

9. Yes

B. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services to be used?

B1. Not applicable

2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

2. Yes

3. FAA Sec. 620(k). If for construction of productive enterprise, will agggregate value of assistance to be furnished by the U.S. not exceed $100 million (except for productive enterprises in Egypt that were described in the CP)?

3. Not applicable.

C. Other Restrictions

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter?

C1. Not applicable.

2. FAA SEc. 301(d). If fund is established solely by U.S. contributions and administed by an internatioal organization, does Comptroller General have audit rights?

2. Not applicable.

3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries?

3. Yes. Arrangements preclude activities as stated.

4. Will arrangements preclude use of financing:

4. Yes

a. FAA Sec. 104(f); FY 1982 Appropriation Act Sec. 525: (1) To pay for performance of abortions as a method of family

-5-

planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion?

b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property?

c. FAA Sec. 660. --To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs?

d. FAA Sec. 662. For CIA activities?

e. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained?

f. FY 1982 Appropriation Act, Sec. 503. To pay pensions, annuities, retirement pay, or adjusted service compensation for military personnel?

g. <u>FY 1982 Appropriation Act, Sec. 505</u>. To pay U.N. assessments, arrearages or dues?

h. <u>FY 1982 Appropriation Act, Sec. 506</u>. To carry out provisions of FAA section 209(d) (Transfer of FAA funds to multilateral organizations for lending)?

i. <u>FY 1982 Appropriation Act, Sec. 510</u>. To finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields?

j. <u>FY 1982 Appropriation Act, Sec. 511</u>. Will assistance be provided for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights?

k. <u>FY 1982 Appropriation Act, Sec. 515</u>. To be used for publicity or propaganda purposes within U.S. not authorized by Congress?

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 83 to FY 86
Total U.S. Funding $25,300,000
Date Prepared:

Project Title & Number: 518-HG-006 Ecuador Secondary Cities Low Income Housing

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 improve the quality of life for low income and disadvantaged families in secondary cities and market towns of Ecuador.	The provision of 324,000 new or improved housing units in urban areas outside of Quito and Guayaquil by 1985, and the continuing supply of adequate, affordable housing to meet the needs of low income families in these areas.	Evaluation of BEV portfolio and JNV programming documents. Periodic national shelter surveys and analyses by JNV and other Ecuadorean and international organizations.	GOE continues to carry out its National Development Plan and support the shelter programs laid out in the National Housing Plan for 1980-1984.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY ______ to FY ______
Total U.S. Funding ______
Date Prepared: ______

Project Title & Number: ______

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Purpose: (B-1)	Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)	(B-3)	Assumptions for achieving purpose: (B-4)
To assist the GOE implement its housing policy objectives of:			JNV/BEV programming and budgeting are consistent with the National Housing Plan for 1980-1984.
1) directing greater resources to low income housing needs in secondary cities and smaller towns;	1) Progressive, low income housing in secondary cities accounts for at least 50% of BEV's new investments.	Final project evaluation.	JNV/BEV maintain their commitment to operational decentralization.
2) making JNV's institutional infrastructure more responsive to local needs by strengthening and expanding JNV Regional Offices and decentralizing housing program administration.	2) JNV Regional Offices have assumed full responsibility for the identification, design, implementation, and evaluation of JNV/BEV housing project.		New solution types and financing terms are acceptable to target group.
3) increasing the number of beneficiaries by implementing lower cost construction technologies and mobilizing local resources from municipalities and private developers.	3) JNV/BEV have developed and delivered in secondary cities a typology of housing solutions affordable to families with incomes in the 30th-to-50th %ile range as well as home improvement loans affordable below the 20th %ile.		

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: ____

Life of Project:
From FY ____ to FY ____
Total U.S. Funding ____
Date Prepared: ____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving outputs: (C-4)
1. Low income housing solutions for families in secondary cities and smaller towns with incomes below the median for those areas.	1. Approximately 9,400 new solutions (serviced lots, piso-techo, and enclosed core units) and 5,200 home improvement loans in selected urban areas outside of Quito and Guayaquil.	JNV/BEV certifications submitted as basis of HG disbursements. JNV/BEV project files. Three formal project evaluations.	Cost inflation will be within the levels anticipated in project design. JNV has sufficient resources to meet the physical and personnel costs of decentralization.
2. Greater decentralization of JNV project identification, design, implementation, and evaluation activities.	2.a) Number of JNV Regional Offices increased from frour to six. 2.b) Each Regional Office staff adequately staffed and trained to carry out expanded functions.	Reports submitted by long-term technical consultant.	BEV continues to pursue interest rate policies geared to market rates.
3. BEV financially strengthened and better able to address low income housing finance needs on a nationwide basis.	3.a) BEV portfolio grows by 19.6% per annum over the life of the loan. Return to equity ratio increases from (-)8.1% in 1981 to 9.6% in 1985. 3.b) New repayment schedules and mechanisms introduced which are geared to low income clientele in secondary cities and smaller towns.		

AID 1020-28 (5-75)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: ____

Life of Project:
From FY ____ to FY ____
Total U.S. Funding ____
Date Prepared: ____

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS			MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Inputs: (D-1)	Implementation Target (Type and Quantity) (D-2)			(D-3)	Assumptions for providing inputs: (D-4)
	(US$ 000's)				
	AID	GOE	Beneficiaries		JNV and BEV remain financially sound and carry out their roles in the project.
Housing financing	25,000	8,340	5,330	Project records and evaluations	A U.S. investor can be found.
Technical assistance	115	-	-		BEV will contribute counter-part housing funds according to financial plan.
Design competitions	75	-	-		Sufficient and timely resources for technical assistance are provided.
Studies	100	-	-		
Personnel & facilities	-	120	-		
Contingency	10	10	-		
Total	25,300	8,470	5,330		

INDICES OF HOUSING AND SERVICES CHARACTERISTICS IN SECONDARY CITIES

Demographic Patterns

City	Growth Rate 1974-1984	1980 Population
Guayaquil (Coast)	4.65	1,116,280
Quito (Sierra)	4.41	807,665
Cuenca (Sierra)	4.12	139,209
Machala (Coast)	7.02	107,279
Ambato (Sierra)	3.71	100,046
Manta (Coast)	5.16	89,468
Esmeraldas (Coast)	5 68	87,464
Portoviejo (Coast)	5.34	84,574
Milagro (Coast)	5.62	76,901
Riobamba (Sierra)	2.90	71,104
Quevedo (Coast)	7.18	68,214
Loja (Sierra)	3.77	61,610
Ibarra (Sierra)	3.94	57,116
Santo Domingo (Coast)	8.66	51,377
Babahoyo (Coast)	4.19	37,827
Chone (Coast)	4.78	32,595
Tulcan (Sierra)	3.10	30,694
Latacunga (Sierra)	3.00	27,574

Source: INEC, Proyeccion de la Poblacion del Ecuador por Areas Urbanas y Rural, Provincias y Cantones 1974-1994, Abril, 1978.

Housing Deficits

City	Number of Units Needed: To Replace Substandard Units (qualitative)	To Eliminate Overcrowding (quantitative)	To Accommodate New Household Growth 1980-1984 (quantitative)
Cuenca (S)	2,201	5,604	4,750
Machala (C)	3,820	3,826	6,258
Ambato (S)	2,068	2,707	3,045
Manta (C)	2,945	4,388	3,428
Esmeraldas (C)	n.a.	n.a.	4,150
Portoviejo (C)	3,556	4,829	3,749
Milagro (C)	4,004	2,568	3,668
Riobamba (S)	1,023	2,820	1,550
Quevedo (C)	3,176	2,352	4,070
Loja (S)	1,267	2,302	2,363
Ibarra (S)	1,488	1,731	1,744
Santo Domingo (C)	1,332	1,089	3,507
Babahoyo (C)	1,884	1,696	1,264
Chone (C)	1,388	2,081	1,289
Tulcan (S)	n.a.	n.a.	767
Latacunga (S)	639	1,014	663
Total of Sample	28,866	48,082	46,265

Note: C=Coast; S=Sierra

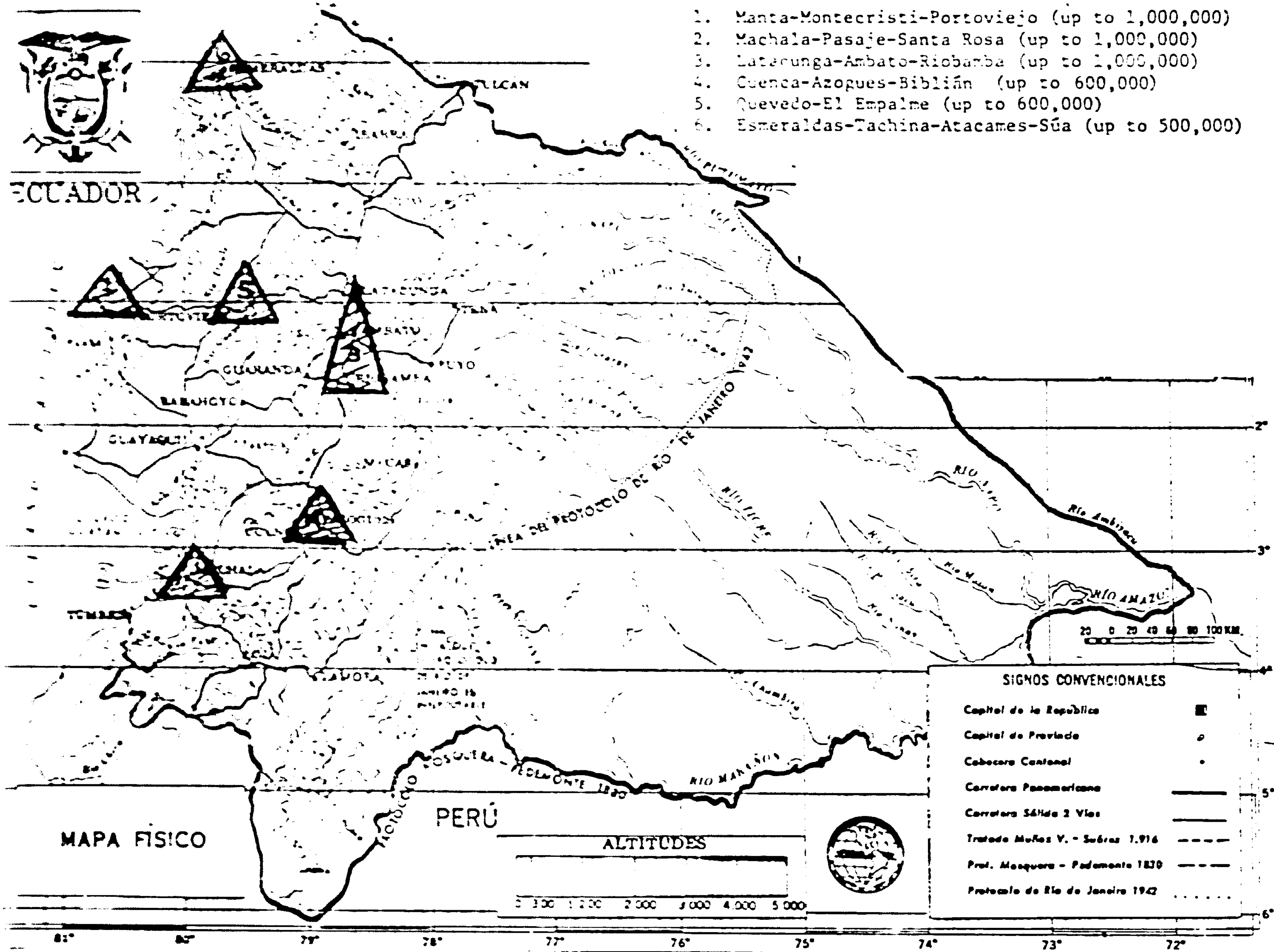
SOURCE: INEC, unpublished data.

Availability of Facilities to Households (1980)

City	Percentage with Electrical Power	Piped Water	Private Toilets	Latrines	Sewerage
Cuenca (S)	92.5	92.3	80.0	2.0	8.8
Machala (C)	65.6	83.5	54.7	26.0	39.0
Ambato (S)	93.3	93.9	90.0	0.8	98.2
Manta (C)	67.3	86.2	59.7	29.4	5.3
Esmeraldas (C)					
Portoviejo (C)	67.1	89.7	75.8	18.6	49.3
Milagro (C)	66.5	95.7	60.4	30.0	42.0
Riobamba (S)	91.2	96.1	88.6	2.3	88.2
Quevedo (C)	55.8	50.9	54.1	28.5	36.9
Loja (S)	91.5	97.5	80.0	1.4	82.0
Ibarra (S)	88.5	88.3	72.2	7.4	73.4
Santo Domingo(C)	79.1	62.6	66.6	15.2	54.0
Babahoyo (C)	62.5	93.4	60.9	15.1	51.6
Chone (C)	54.3	76.5	62.0	27.6	7.4
Tulcan					
Latacunga (S)	90.8	94.0	81.1	0.8	83.4

SOURCE: INEC, unpublished data.
Note: C - Coast; S - Sierra

1. Manta-Montecristi-Portoviejo (up to 1,000,000)
2. Machala-Pasaje-Santa Rosa (up to 1,000,000)
3. Latacunga-Ambato-Riobamba (up to 1,000,000)
4. Cuenca-Azogues-Biblián (up to 600,000)
5. Quevedo-El Empalme (up to 600,000)
6. Esmeraldas-Tachina-Atacames-Súa (up to 500,000)



Ecuador: Regional Growth Poles and Projected Population

Description of Illustrative Subprojects

The list of subprojects contained herein is representative of the typical activities to be financed under the HG loan. Each of these activities are reflected in the JNV's programming documents for 1982-84.

Portoviejo

Portoviejo is a component of the National Development Plan's priority growth role area that includes Manta and Montecristi as well as the capital of the Province of Manabi and site of the JNV Regional Office. Its population in 1980 reached 84,574 reflecting a rate of growth of 5.34 percent per annum during the period 1974-1980. The availability of basic infrastructure in 1980 showed that 67.1 percent of the population had access to electricity; 89.7 percent had access to water; and 49.3 percent had access to sewerage. It is estimated that approximately 3,500 solutions will be needed to replace substandard units. This need will be addressed through home improvement programs. Improved local materials will be employed by local builders in the improvement area. An estimated 8,500 new solutions will be required during 1980-1984 of which 4,800 are to eliminate overcrowding and 3,700 are to accomodate new household formation.

1. A Plan Piso-Techo subproject is being developed by the Portoviejo Regional Office. The project calls for 450 minimal, unenclosed solutions with an $18m^2$ concrete slab and covered with a galvinized roof (piso-techo). The subproject is to be built by private developers following JNV policy of leveraging its resources to provide greater coverage, expand its implementation capacity, and control its administrative costs. The first stage called for in the 1982 Operational Plan will be a pilot effort of 50 solutions to be built on lots of $90m^2$. The second and third stages to be constructed during 1983 and 1984 will be 200 units each. The dwellings are estimated to cost S/90,000 ($2,727) in 1981 prices. The total cost is estimated to be S/40,500,000 or $1.23 million.

2. A pilot home improvement program will provide loans to low income families in squatter areas now appearing on the hillsides around Portoviejo and older, established neighborhoods that have only recently been reached by infrastructure distribution and trunk lines. It is anticipated that the principal improvements will be service connections and other infrastructure related construction. This would include sanitary core and kitchen facilities primarily. Materials replacement loans will also be made especially for roof sheets and poorly maintained wall and floor materials. The program will be carried out in stages, the first of which being a pilot effort providing S/3,000,000 (US$90,900) with maximum loan amounts being S/50,000 ($1,500) or at least 60 loans. This program will provide the Regional Office with the

administrative, promotional and collection experience to be able to manage the larger programs to be carried out in subsequent years. Based on the experience gained, an increase in funds will be made available in proportion to the demand presented above. The total amount of funds estimated required through 1984 is S/27,000,000 or $820,000.

Manta

Manta with a population of 89,468 inhabitants in 1980 is the principal port of the Province of Manabi and slightly larger than Portoviejo. Manta is the economic focus of the priority growth role and located approximately 50 kilometers from Portoviejo, on a paved road, a site easily serviceable by the JNV regional office. Manta's rapid rate of growth of 5.16 percent has given rise to squatter and other illegal settlements most of which overloads basic services. As of 1980, 67.3 percent had access to electricity; 5.3 percent had access to sewerage; and 86.2 percent had access to water in the areas that had been urbanized excluding the squatter areas.

It is estimated that 2,945 shelter solution will be needed to improve substandard dwellings. As much as possible, the qualitative element of the shelter deficit will be addressed through home improvement and neighborhood upgrading loan programs. This approach views existing dwellings as an investment to be improved when necessary, not discarded. Improved local building materials complementary to and compatable with the existing structures will be promoted through the improvement and upgrading loans.

The improved building systems would stress maintenance and improved design that would lead to increased durability as well as other improvements such as standarizing dimensions, finishes resistance to insects and structural soundness. An estimated 7,814 units will be required during 1980-1984 of which 4,388 units are to eliminate overcrowding and 3,428 units are to accommodate new household formation.

1. A sites and services subproject is to be carried out in Manta to provide reception areas for the rapid growth Manta is undergoing due to new family formation and immigration from the drought stricken rural areas. The subproject calls for the construction of 4,038 serviced sites of up to 80m². The basic services to be provided will be installed in stages that include community water taps and private toilets. Units will then be connected to the distribution lines financed by home improvements loans that would be available to the project families as their incomes permit. This is a radical departure for the JNV which has traditionally required all projects to be built to high and complete infrastructure standards. The subproject is to be built on 37.6 hectares of land in two stages. The first stage calls for 2,200 serviced sites. These solutions will cost S/557.78 m² of usable land (area util) or

S/44,600 ($1,352). The total project costs is S/135,562,851 ($4.1 million). It is estimated that families earning S/2,285 ($69) monthly will be able to afford this solution.

2. A Plan Piso-Techo subproject similar to the one to be developed in Portoviejo will be developed and tested in Manta as well as by the Regional Office. This option offers a more complete alternative to those low-income families that can afford it. By expanding the range of solution types lower income families opportunities increase since the pressure of demand that usually forces families to buy less than they can actually afford have an option tailored to their economic specifications. The subproject calls for 450 piso-techo units to be built over the next three years. The first stage indicated in the 1982 Operational Plan consists of 50 solutions of 18 m^2 on lots of 90m^2. The feasibility of including piso-techo solutions on the coast of Ecuador is greatly enhanced by the active local building traditions and readily available low cost regional building materials such as bamboo, that would be used to enclose and expand the minimal core unit. Local constructi n foremen (maestros de obra) and others skilled in bamboo construction techniques will complement the self-help efforts. Local construction companies will be awarded contracts through a bidding process administered by the JNV Regional Office. The second and third stages of this subproject consist of 200 solutions each and will cost approximately S/90,000 ($2,727) for a total cost of S/40,500,000 or $1.23 million.

3. A pilot home improvement program will be carried out in 1982. This first stage of the program will provide S/3,000,000 ($90,900) for loans of up to S/50,000 ($1,500) for at least 60 loans. Subsequent stages will provide approximately S/27,000,000 ($820,000). The program will support the two progressive development site and service and piso-techo subprojects cited above as well as in the squatter settlements that ring Manta. Priority improvements will include house connections to basic infrastructure and related construction activities in the squatter areas. In the new subproject area, house connections and enclosing and expanding the minimal piso-techo units will be priority improvements. Following the experience gained in Guayaquil, the Regional Office will work with community groups and cooperatives existing in the squatter areas, and those to be formed in the new project area. The Regional Office will explore the possibilities of using other private sector entities such as credit unions to control administrative costs, to improve loan recuperations, and to upgrade local institutional skills levels.

Chone

Chone is one of the priority secondary cities the National Development Plan has targeted for growth. It is located in the Province of Manabi approximately 70 kilometers north of Portoviejo or about an hour and a half by car easily accessible to the JNV Regional Office Staff. Chone is growing rapidly at 4.78 percent annually and in 1980 had over 32,000 inhabitants. The rapid rate of growth is attributable not only to new family formation, which for the period 1980-1984 is projected to reach 1,289 families, but to immigration from the surrounding areas that evidences itself in housing deficit figures requiring 2,081 dwellings to eliminate overcrowding. Home improvement loans are also required to upgrade an estimated 1,388 substandard units and to provide support for upgrading Chone's infrastructure. As of 1980, 54.3 percent of the houses had electricity; 76 percent had piped water and 7.4 percent had sewerage.

Civil disturbances have recently brought Chone's critical situation to national attention. The root cause of the disturbances can be attributed to the disregard and neglect smaller urban areas have felt and which the subproject will alleviate. As part of the GOE response, the JNV 1982 Operational Plan calls for a home improvement and community upgrading program. The pilot effort will provide S/2,500,000 ($75,700) for individual and neighborhood improvements. Priority efforts relate to infrastructure and related construction followed by the construction of room additions and then materials replacement. The maximum loan amount will be S/50,000 ($1,500) for at least 50 loans. Subsequent stages will receive increased funding of up to S/10,000,000 ($303,000) per year over the period 1983 - 1984 for a total cost of S/22,500,000 ($680,000). As in Manta, the Regional Office will work with housing cooperatives and community groups to control administrative costs, promote cost recuperation and stimulate beneficiary participation.

Cuenca

Cuenca is the third largest city of Ecuador with a population of 139,209 inhabitants and is the capital of the Province of Azuay. It is the focal point of one of the two growth poles to be developed in the Sierra that includes Azogues and Bibl@n. It is also the site of the JNV Regional Office responsible for projects in the provinces of Canar and Morona-Santiago besides Azuay. The housing characteristics of Cuenca are prototypical of urban areas in the Sierra that have relatively greater access to basic services, less illegal land settlement, and increased overcrowding. The housing deficit in Cuenca breaks down as follows: 2,201 solutions to replace substandard units; 5,604 solutions to eliminate overcrowding; and 4,750 solutions to accommodate new household formation for 1980-1984. The availability of basic services to households in Cuenca is as follows: 92.5 percent have electricity; 92.3 percent have piped water and 78.8 percent have sewerage.

1. The Cuenca regional office with technical assistance from JNV Headquarters in Quito is developing a subproject on a recently acquired six hectare parcel of land on the road leading into town. The subproject calls for 360 solutions to be built. The solutions are minimal dwellings that range in size from 18 m^2 to 45 m^2 to be constructed on 100 m^2 lots. These

dwellings will provide a sanitary core and an open multifunctional space to be used and subdivided as each family sees fit. The minimal dwellings will be different than those built on the coast in that each dwelling will be sold already enclosed due to the demands of climate. Wall materials will be improved adobe or locally produced fired clay bricks, materials readily available in the Sierra. Subdividing and adding on to the minimal dwelling originally acquired will be carried out by self-help. Infrastructure and minimal dwelling construction will be contracted to local construction companies. The minimal dwelling units will range in cost from S/85,000 for the $18m^2$ unit to S/103,000 for the $45m^2$ unit. The total cost of the subproject, based on a 60 percent $45m^2$/40 percent $18m^2$ distribution, is estimated to be S/34,488,000 ($1.05 million).

2. The Regional Office in Cuenca is also working with a cooperative to develop its program on the cooperative's land. The subproject is a pilot effort with cooperatives that are affiliated with the Housing Cooperative Federation of Azuay (UNCOVIA) to encourage low-income family cooperative development. The income levels of most of the housing cooperatives is beyond the median income level although elements of each cooperative would qualify. The Regional Office is looking into a matching fund mechanism that would finance cooperative housing projects with A.I.D. and BEV funds. The A.I.D. resources would finance families with incomes below the median and BEV would finance the remainder earning incomes above the median. The mechanism would encourage subprojects with a relative mix of income strata and lend itself to the social, land and infrastructure resources that form part of the housing cooperative patrimony. The project calls for 150 basic core units to be built on lots of approximately $90m^2$. The solutions will cost approximately S/95,000 ($2,878) or a total project cost of S/14 million ($425,000).

Azogues

Azogues is the capital of the Province of Canar and part of the priority growth pole strategy of the GOE. With almost 13,000 inhabitants it is located about 40 kilometers from Cuenca and the JNV Regional Office responsible for shelter programs there. Travel to and from Cuenca is by road and train. As of 1974, Azogues had a growth rate of 2.8 percent. The availability of basic infrastructure according to the 1974 census is extremely limited. Only 19.3 percent of the dwelling units in Azogues have electricity and only 26.8 percent have water. Latrines are the most common form of toilet if any form is available at all and according to the census date almost half of the dwellings require upgrading.

1. A pilot home improvement program will be carried out as the first stage of a three stage effort. The first stage will finance loans up to a total of S/2,500,000 or at least 50 loans. This effort will be the training experience for the Cuenca Regional Office for this type of program and sub-

sequent stages in Azogues and other urban areas in the region will provide larger amounts more in accord with demand. Subsequent stages in Azogues will provide S/10,000,000 in additional funds over the two year period, 1983-1984 for a total program amount of S/12,500,000 ($380,000). Home and community upgrading will focus on the provision of infrastructure and infrastructure related improvements. As on the coast, there is a need to legalize tenure through the purchase of land. Room additions built of improved adobe and/or locally produced fired clay bricks will also be likely improvements.

2. In addition, the Cuenca Regional Office is developing a subproject that calls for 50 basic core units of 36 m^2 on $90m^2$ lots. The units will cost an estimated S/110,000 (1982 prices) for a total cost of approximately S/5.5 millon ($165,000). The solutions will provide individual house connections for water and latrines as the first infrastructure phase. As part of JNV policy, local construction companies will be contracted to build the subproject using local labor and materials.

Macas

Macas is the capital of the eastern jungle province of Morona-Santiago and one of the GOE's priority secondary cities. Officially known as Morona, the population has grown almost 50 percent from 1974 to almost 3,000 inhabitants in 1980. Population growth is due in large part to migration from the surrounding areas. In 1974, 24.9 percent of the total population of 2,048 or 509 persons were immigrants. Macas is part of the Cuenca Regional Office, about nine hours from Cuenca connected by an all weather road. Except for electricity, basic services are provided almost entirely on an individual basis.

1. A pilot Plan Piso-Techo project will be developed by the Cuenca Regional Office. The project calls for 100 piso-techo units to be developed in three stages. The first stage will have 25 units of $18m^2$ as indicated in the 1982 Operational Plan to be built on lots of $100m^2$. The estimated unit cost is S/85,000 ($2,575). The total cost is an estimated S/8,500,000 ($260,000). This will be the pilot effort in the eastern jungle region and serve as the example for such other potential subproject areas as Puyo, Tena, Coca, etc. Improved local building materials systems will be used to develop and expand the piso-techo units. The subproject will be built by local skilled labor and rely on self-help to improve the piso techo units through loans provided by the home improvement program described below.

2. In support of the progressively developed piso-techo units and as a means of initiating community and individual upgrading activities an improvement program will be developed in Macas as well. The program will have funds of up to S/2,000,000 ($60,000) for a three year period. The first stage will provide S/500,000 for loans of up to S/50,000 for at least 10 loans. The JNV

will work with cooperatives or other local community groups as a means of maximizing community participation in the program. At the community level, infrastructure improvements could be made to provide electricity and water to areas now unserviced. Individual infrastructure connections and infrastructure related construction improvements such as sanitary cores and kitchen spaces will be priorities. For the new construction subprojects, priority loans would be for enclosing and expanding the piso-techo unit through self--help efforts.

Pasaje

Pasaje is part of the National Development Plan Growth Pole Strategy. Along with Santa Rosa and Machala, it forms the priority growth center in the Province of El Oro on Ecuador's southern coast. The cities of the Province of El Oro have been subjected to extremely rapid rates of growth over the past few years. Machala's rate of growth has almost reached 10 percent per annum, and that of Pasaje is not far behind. The population of Pasaje has grown from 21,820 inhabitants in 1974 to 28,126 in 1980. As in many of Ecuador's coastal towns, this explosive growth has manifested itself in illegal, mostly squatter settlements that lack basic services and adequate planning which make their provision more difficult and therefore more costly. Shelter programs for the Province of El Oro are managed by the JNV Regional Office in Guayaquil about 150 kilometers away or a .5 hour drive over excellent roads.

1. A sites and services subproject is to be carried out in Pasaje to provide reception areas for the rapid growth occurring there. The subproject calls for the construction of 60 sites and services solutions to be offered in two stages. The serviced sites will have an area of up to $80m^2$. The $80m^2$ solutions will cost S/44,600 ($1,350). The total cost is an estimated S/26,000,000 or slightly over $800,000.

The serviced site solutions will offer as the subproject's first phase minimal levels of urbanization such as gravel roads, communal water standpipes, electricity and latrines. Home improvement loans will be available to support self-help efforts to build a basic unit in which the family can occupy their lot. The JNV has signed an agreement with a local private sector building materials producer who has put on to the market a very low cost 18 m^2 basic core kit built of bamboo at a very low price. A sanitary core would be added later. The JNV Regional Office will promote the use of this resource that would be assembled by each family on its site and initiate the phased development of its home.

2. A home improvement program will be established by the Guayaquil Regional Office to provide support for the sites and services subproject. As mentioned above, improvements would include the purchases of the bamboo basic core kit, infrastructure related loans for house connections, septic tanks,

sanitary cores and kitchen units and their additional space using the basic core kit or other means. The first stage will finance up to S/3,000,000 ($90,900) or at least 60 loans. Subsequent stages will receive increased funding of up to S/10,000,000 ($303,000) per year over the period 1983-1984 for a total project cost of S/22,500,000 ($680,000). Even though monitoring the subproject area from the Regional Office in Guayaquil has presented no problems in the past, the Regional Office will seek participation of community based organizations in monitoring collection and inspection activities.

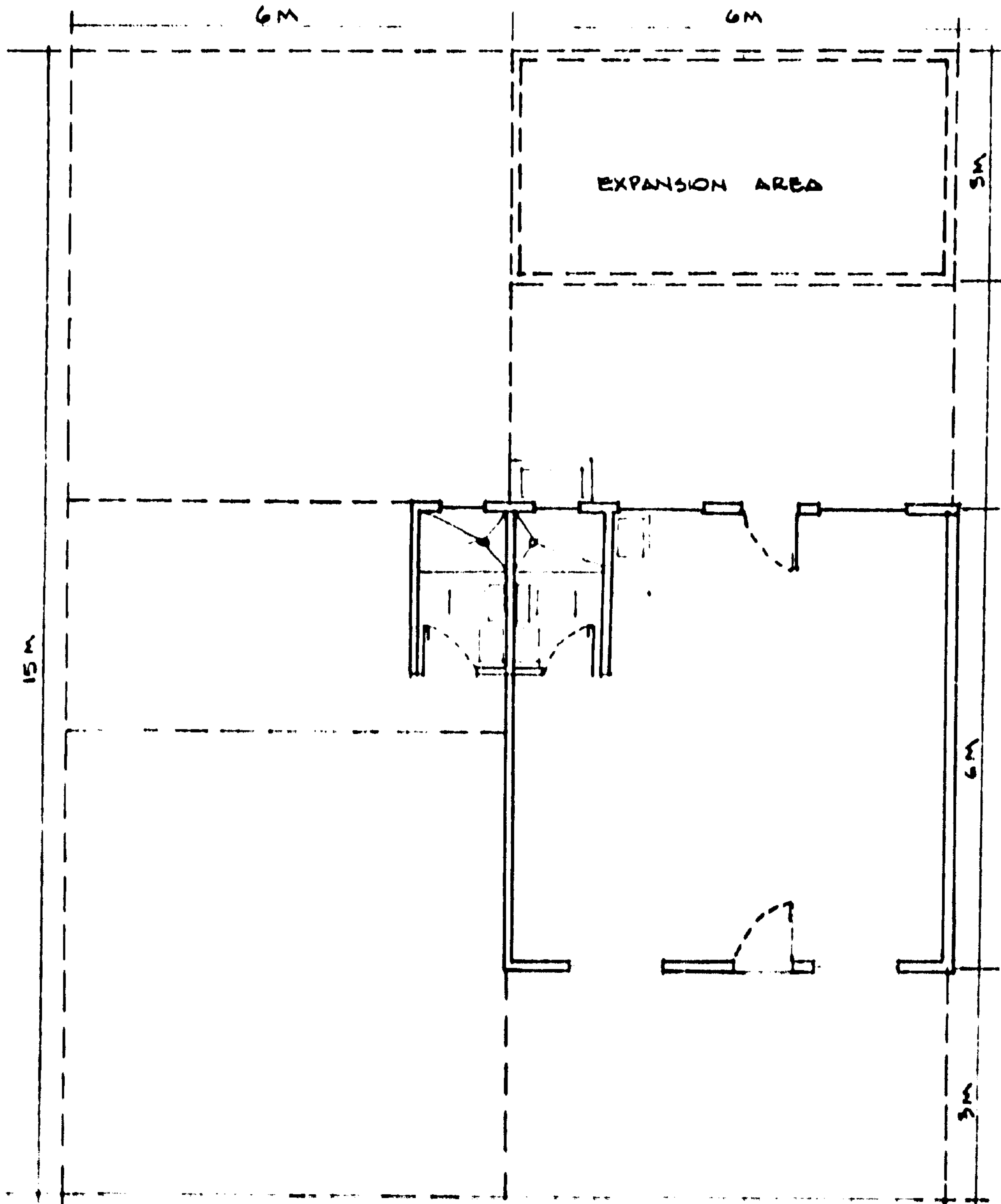
Santa Rosa

Santa Rosa is part of the priority growth pole in the Province of El Oro. Like Pasaje, Santa Rosa is growing rapidly in a disorderly, unplanned way. Its populations has grown from 19,745 inhabitants in 1974 to almost 27,000 inhabitants in 1980. Santa Rosa is approximately the same distance from the Guayaquil Regional Office which has programmed similar projects for Santa Rosa as it has for Pasaje. These projects will complement the sites and services project now being carried out as a pilot effort in Machala which will be financed by the World Bank.

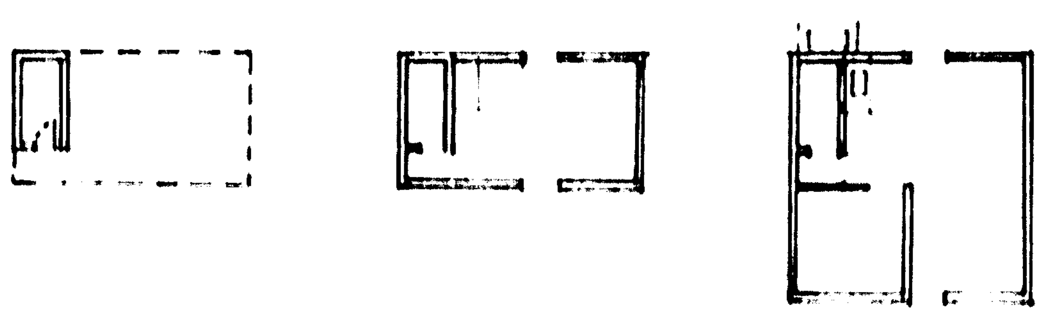
1. A sites and services subproject similar to the one in Pasaje is to be developed by the JNV. The subproject calls for 650 serviced lot solutions in reception areas required to settle the rapid growth that Santa Rosa is experiencing. The sites and services solutions will have an area of up to $80M^2$ and cost S/44,600. The total subproject cost is an estimated S/29 million ($880,000). Home improvement loans will be available for the purchase of bamboo minimal core units. A local producer will provide these building elements.

2. A home improvement program will be established to support the sites and services progressive development scheme. As in Pasaje, the loans will go primarily for basic shelter units, infrastructure and infrastructure related improvements. The first stage will finance up to S/3,000,000 ($90,900) or at least 60 loans. Subsequent stages will receive up to S/10,000,000 ($303,000) or at least 200 loans per year over the next two year period for a total cost of S/22,500,000 ($680,000). Private developers will be contracted to build the sites and service subproject; community organizations such as cooperatives, credit unions and neighborhood associations will participate in both the reception areas and home improvement programs.

Annex III
exhibit C
pg 8a



SANITARY CORE UNIT BASIC CORE UNIT



STAGE 1
AREA : 3 M²

STAGE 2
AREA : 18M²

STAGE 3
AREA : 36M²

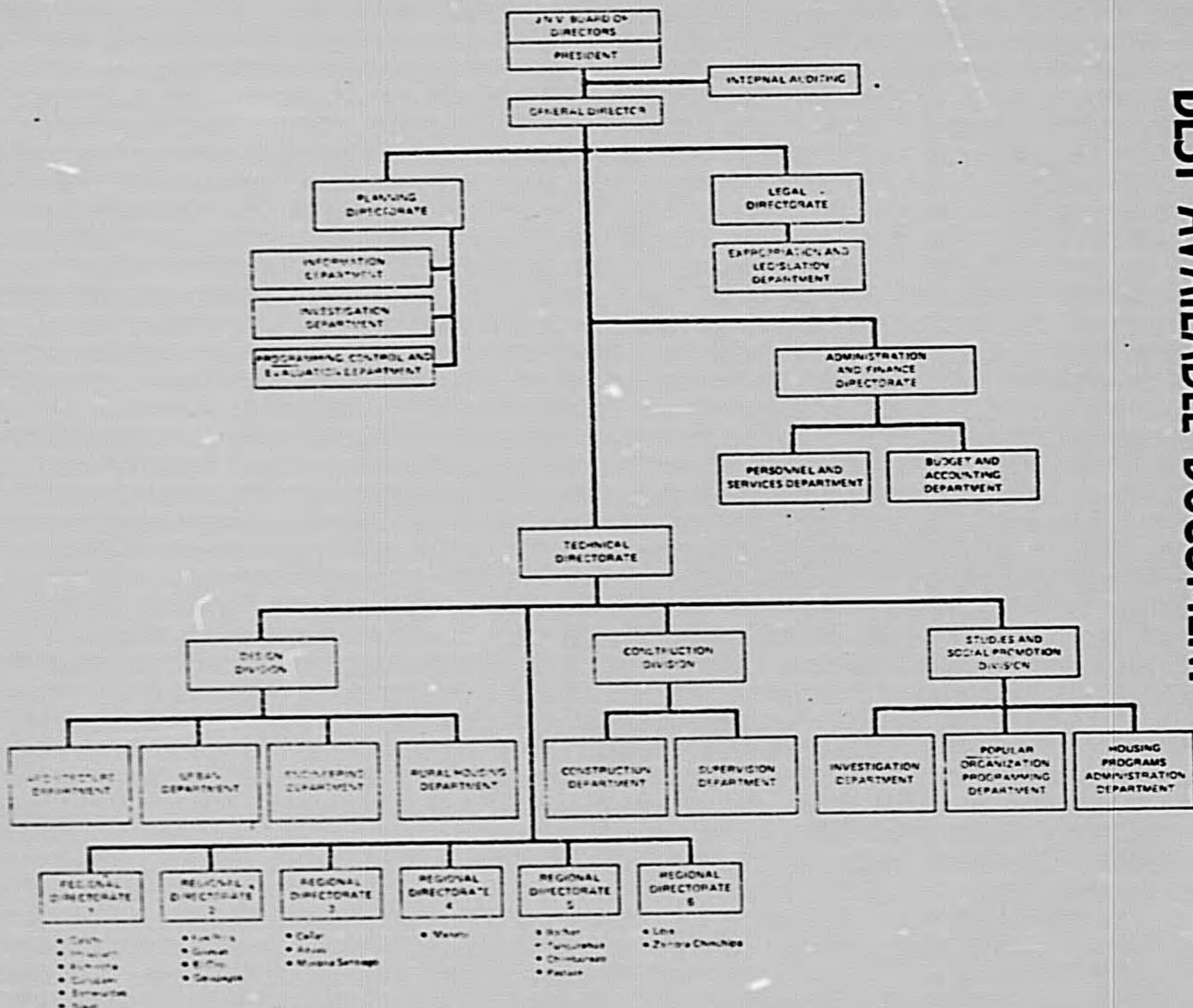
DWELLING UNIT DEVELOPMENT STAGES

STAFFING PATTERN OF THE NATIONAL HOUSING BOARD

(JUNTA NACIONAL DE LA VIVIENDA - JNV)

Office	Directors	Profession-als (lawyers, economists)	Technicians (architects, engineers)	Administra-tive	Service	Total
QUITO	6	27	94	32	14	169
GUAYAQUIL	1	18	60	28	11	122
CUENCA	1	3	7	4	2	17
LOJA	1	3	6	4	2	16
PORTOVIEJO	1	4	6	4	2	17
RIOBAMBA	1	2	3	4		10
TULCAN		1	2	1		4
STO. DOMINGO		1	1	1		3
AMBATO		1	2	1		4
GUARANDA		1	1	1		3
ESMERALDAS		1	1	1		3
QUEVEDO		1	1	1		3
MACHALA		1	2	1		4
EL PUYO		1	1	1		3
LATACUNGA		1	1	1		3
MANTA		1	1	1		3
IBARRA		1	2	1		4
BABAHOYO		1	1	1		3
CHONE		1	1	1		3
TOTAL	11	70	193	89	31	394

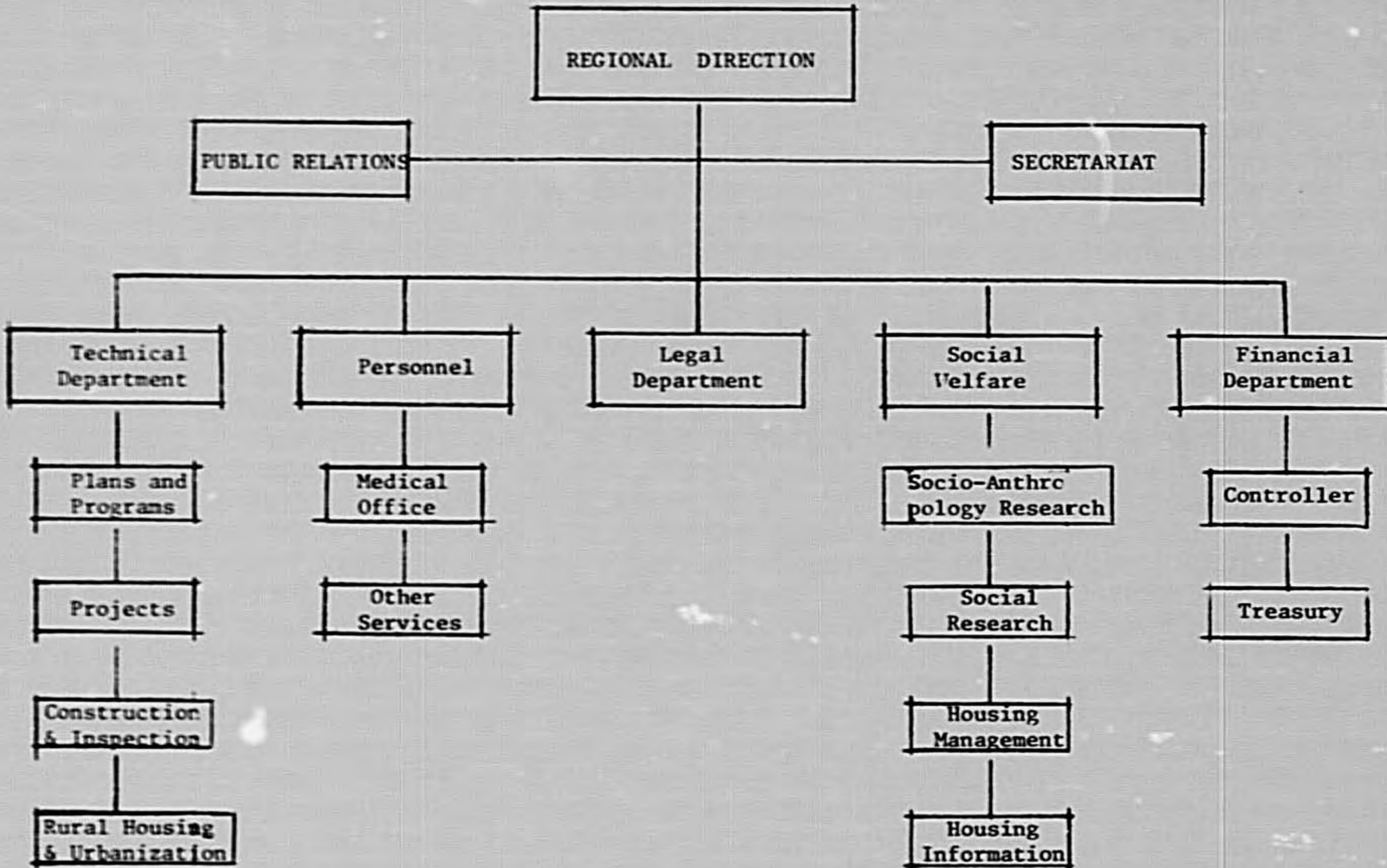
J.N.V. ORGANIZATION CHART



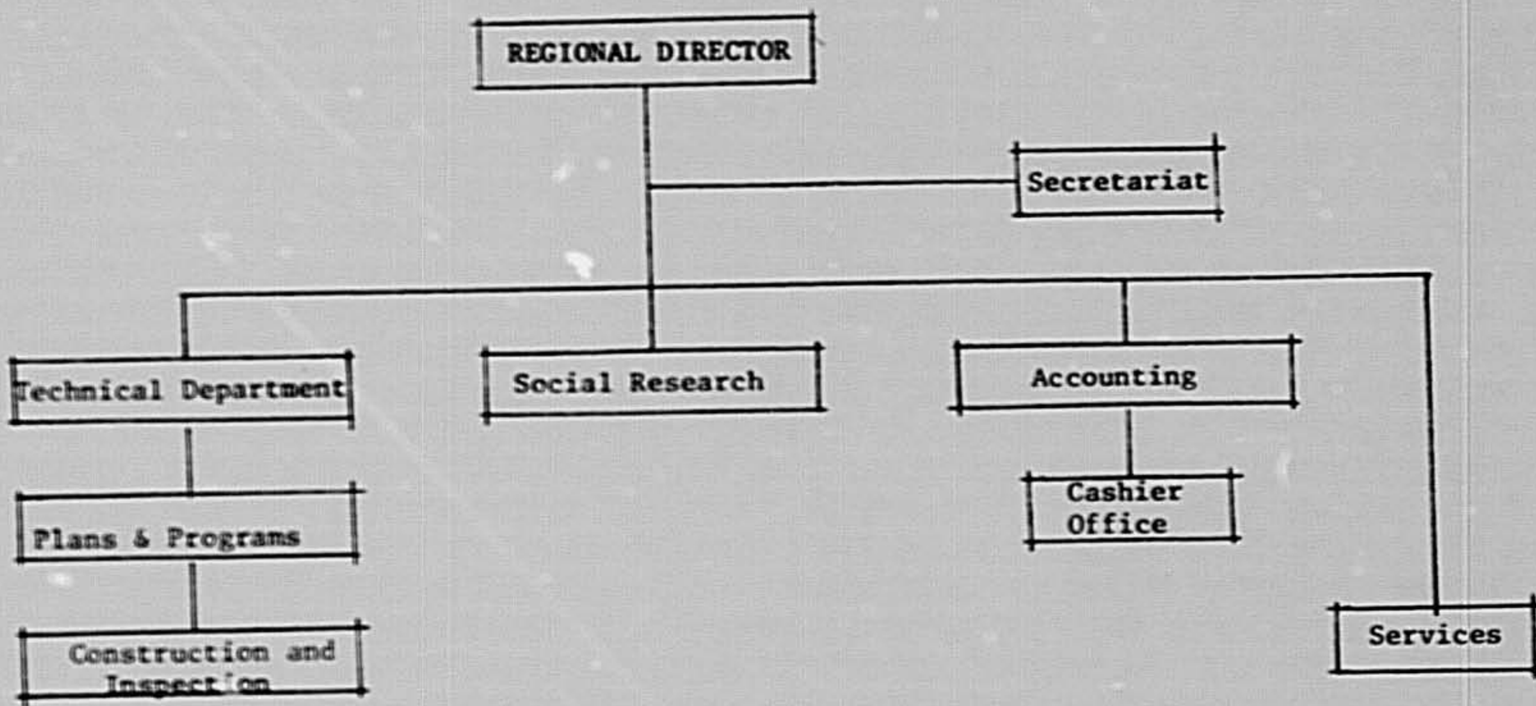
BEST AVAILABLE DOCUMENT

Annex IV
Page 2 of 9

J.N.V. REGIONAL OFFICE: GUAYAQUIL



J.N.V. REGIONAL OFFICES: CUENCA, LOJA, PORTOVIEJO

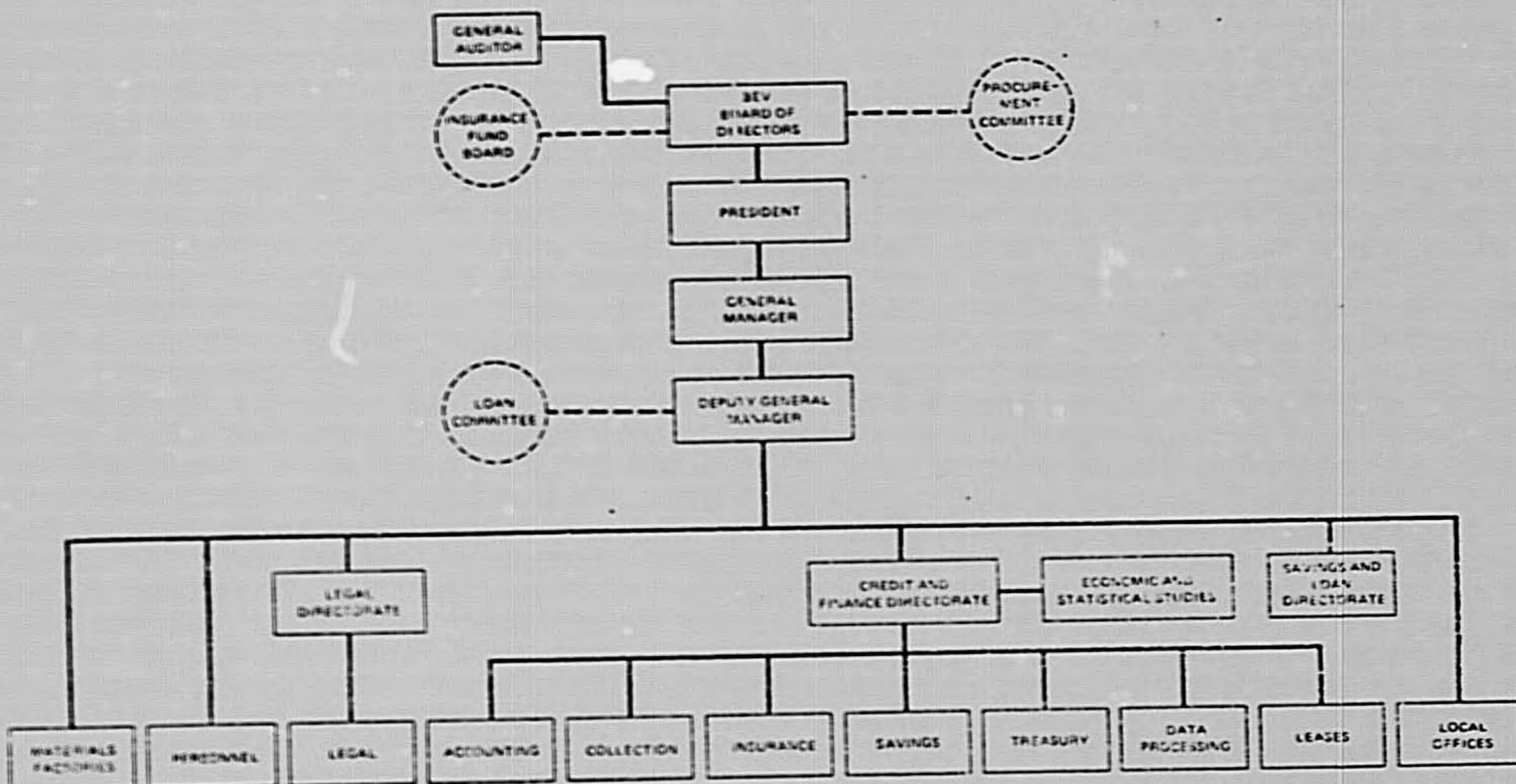


STAFFING PATTERN OF THE ECUADOREAN HOUSING BANK

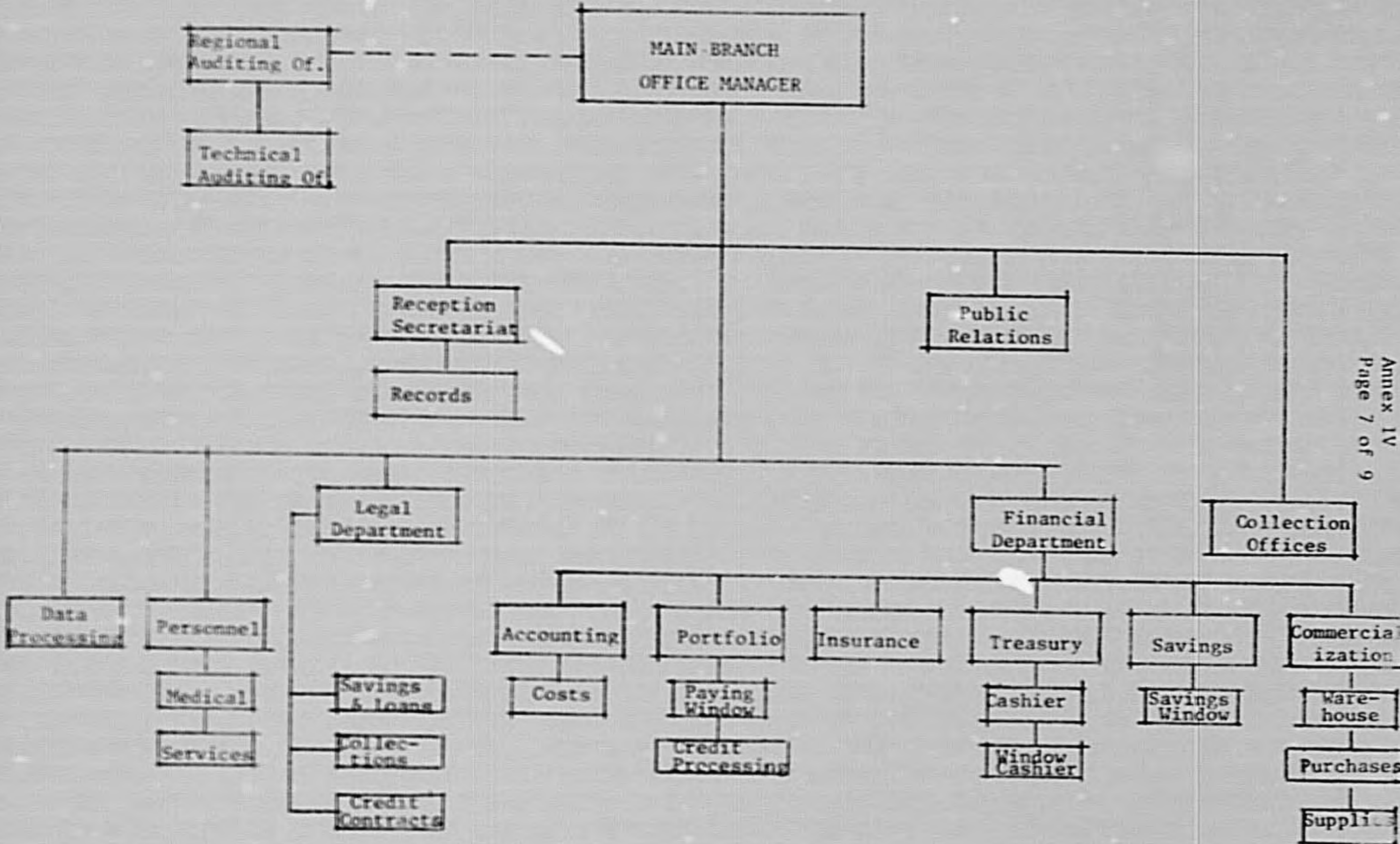
(BANCO ECUATORIANO DE LA VIVIENDA - BEV)

Office	Directors	Advisors	Profession-als (lawyers, economists)	Technicians (architects, engineers)	Administrative	Service	Total
QUITO	13	3	4	58	220	87	385
GUAYAQUIL	2		8	34	175	54	273
CUENCA	1		3	1	17	3	25
LOJA	1		1		16	3	21
PORTOVIEJO	1		1		15	7	24
RIOBAMBA	1		1		9	3	14
TULCAN	1		1		8	3	13
STO. DOMINGO	1		1		11	3	16
AMBATO	1		1		8	4	14
GUARANDA	1		1		8	2	12
ESMERALDAS	1		1		8	2	12
QUEVEDO	1		1		11	5	18
MACHALA	1		1		10	1	13
EL PUYO	1		1		8	2	12
LATACUNGA	1		1		8	3	13
MANTA	1		1		12	3	17
IBARRA	1		1		8	2	12
BABAHOYO	1		1		8	2	12
CHONE	1		1		9	2	13
TOTAL	32	3	31	93	569	191	919

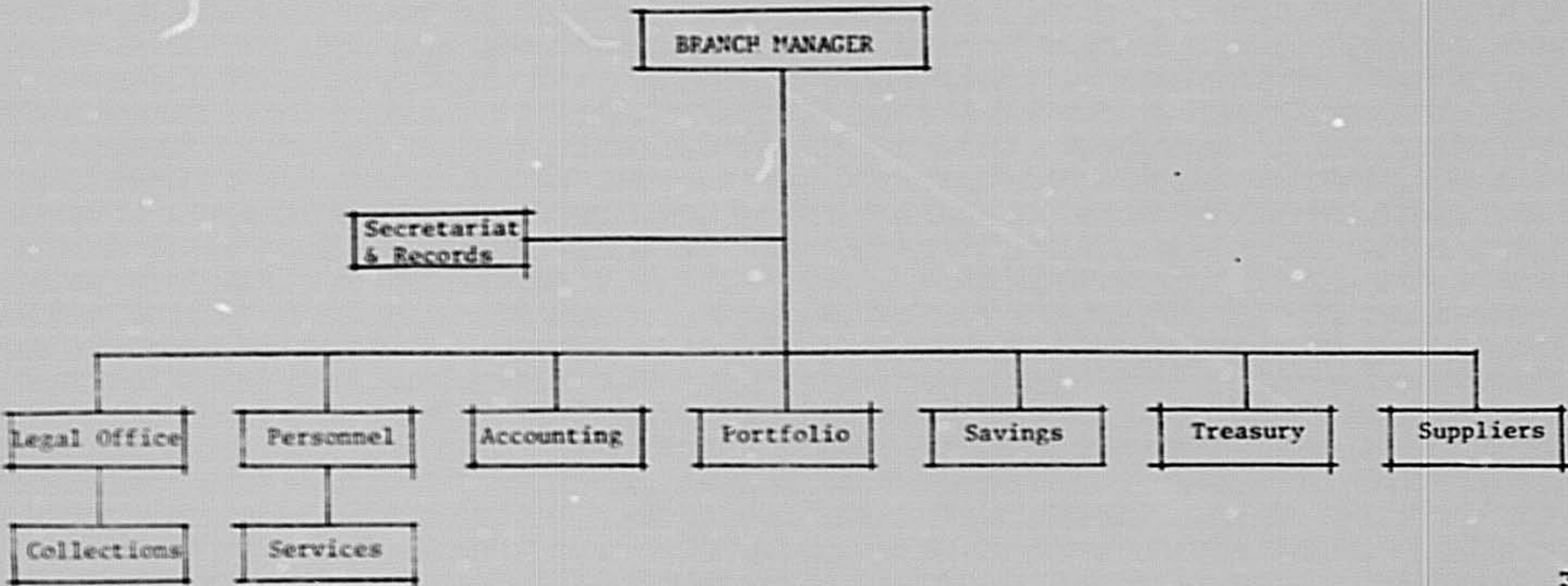
B.E.V. ORGANIZATION CHART



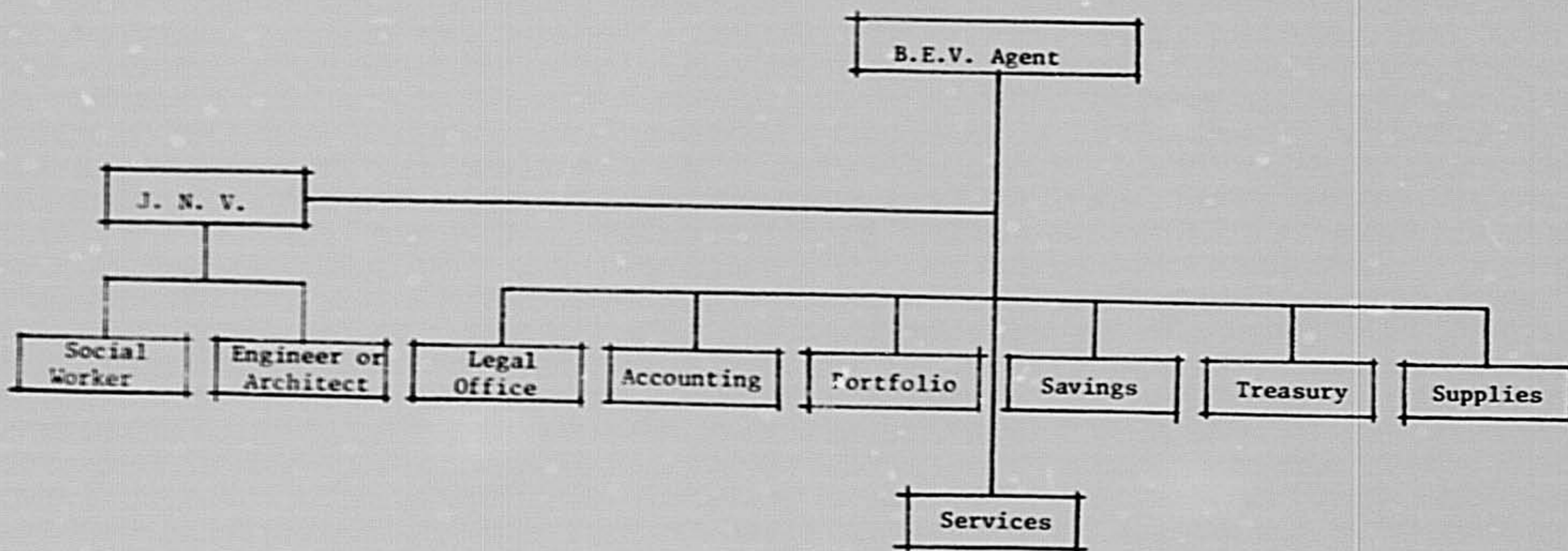
B.E.V. BRANCH OFFICE: GUAYAQUIL



B.E.V. BRANCH OFFICES: CUENCA, LOJA, PORTOVIEJO



B.E.V. - J.N.V. AGENCIES



SOCIAL SOUNDNESS ANALYSIS

A. Target Group Description

The target group will be families with incomes below the median income in urban areas (secondary and tertiary cities) excluding Guayaquil and Quito. The 1981 median family income for these cities was 4,300 sucres per month. Urban centers are defined as those with populations of 2,000 inhabitants and more. Secondary cities are those with populations over 40,000 and tertiary cities including market towns are those with populations of 10,000 to 40,000.

The maximum income of the target population is estimated to be about S/5,200 in 1983, assuming an annual increase in nominal income of ten percent. Since the minimum legal wage in Ecuador is set currently at S/4,000, it is clear that the majority of the target families do not have regular work but belong to the informal labor sector, working as street vendors, self-employed artisans, and in domestic service. Data from the Social Research Division of the JNV suggests that a significant percentage of the secondary cities populations represents migrants from the countryside, particularly from the lesser developed provinces to provinces with larger urban centers. The heads of new households tend to be young, the majority under 35, with family size estimated at five persons. This figure is slightly higher on the coast. USAID analysis of national census data confirms step-wise migration to urban centers. The poorest segments of the secondary cities include a large percentage of recent migrants from the countryside and from smaller towns.

1. Target Group Incomes

There are, in comparative terms, more poor people in secondary cities. Income data collected from 25 urban areas by the National Census Bureau (INEC) in 1981 show that for cities excluding Quito and Guayaquil, the median household income is 4,300 sucres/month. This is only two thirds of that in Quito and 79 percent of that in Guayaquil. These figures also point to more equally distributed incomes in secondary cities, but at much lower per capita levels. For this reason, the kinds of housing solutions that are affordable to the below-the-median population are substantially different than those in Quito and Guayaquil. Table V.1 shows the distribution of monthly household income by deciles up to the median income for 1981, 1982, and 1983.

Table V.1

Income by Deciles
(Sucres)

Percentiles	1981	1982*	1983*
0-10	1,540	1,694	1,863
11-20	2,250	2,475	2,722
21-30	2,880	3,168	3,484
31-40	3,570	3,927	4,319
41-50	4,285	4,713	5,184

* updated by a 10% factor based on the GNP and inflation rates.
SOURCE: Encuesta de Presupuestos Familiares de los Centros Urbanos (without Quito and Guayaquil) INEC. 1981. Unpublished data.

2. Occupational Characteristics

Beneficiaries of the project are then most likely to be members of the informal work sector, probably not subject to minimum wage laws, such as self-employed traders and street vendors, artisans and small enterprise craftsmen, personal service workers (both male and female, but particularly the non-live-in maids), and even possibly some low-income office employees. (See Table V.2) Many are migrants from the countryside or from smaller towns. Women heads-of-households expected to be an important target group of the project, are common.

Table V.2

Percentage of Workers Earning Less than the Median Monthly Salary (in 1975) by Labor Categories in Secondary Cities

Category	Percentage Below Median Salary
Service Workers	76.2
Laborers	63.0
Craftsmen	59.8
Salesmen and vendors	55.3
Farmers	51.3
Office employees	44.5
Drivers	28.9
Professionals	16.0
Managers	3.5

SOURCE: INEC: "Encuesta de Poblacion y Ocupacion" Quito, Septiembre de 1976.

3. Population Composition and Characteristics

The target group population in the cities in which HG financed housing may be built is growing quite rapidly. Table III.A.1 of Annex III show that the population growth rate for these cities ranges from 4.12 percent (Cuenca) to over seven percent (Machala-Pasaje-Santa Rosa). The growth rate among low income target group families is high because they tend to be young families which are expanding in size. A JNV planning document, Demanda Nacional de Vivienda y Dimensionamiento de la Oferta, 1980-1984, estimates that in 23 secondary cities 38,908 new household with 1981 incomes below the median of S/4,300
will be established during the five year period, compared to only 19,912 households in Guayaquil and Quito. That is, families with incomes of S/4,300 or below represent 50 percent of total estimated new household formation in the secondary cities, while they will account for only 23 percent of new household formation in Quito and Guayaquil.

4. Characteristics of Current Housing

Housing currently occupied by target group families is often overcrowded and usually lacks services. Tables III.A.2 and III.A.3 demonstrate that in 16 secondary cities surveyed approximately 50,000 housing units are overcrowded and that, particularly in the faster growing "growth pole" cities, there are significant deficiencies in electrical, water, and sewerage services.

The characteristics of existing target group housing tend to vary between coastal and highland cities. On the coast the intended beneficiaries' need for housing is manifested by the squatter settlements which ring the cities. Settlers generally occupy municipal land by force and if they can outlast the effort of municipal authorities to dislodge them, will then apply to the municipality for installation of infrastructure and legalization of tenancy. The process is risky and it may take several years before the neighborhood is recognized and serviced.

In the Sierra, the most common solution available to low-income families is to live in inquilinato (as a tenant). The other course of action that appears in the Sierra cities where municipalities are generally not large land holders is that of the clandestine development. Technically illegal, the clandestine development consists of the subdivision of a large property by the owner and sale of lots to individuals. Often the titles are not recognized by the municipality since compliance with certain standards of urbanization--specifically installation of water supply, sewer system and electricity--would be required prior to sale. Like the squatter on municipal grounds, a settler in a clandestine development must wait until the municipality accepts the existence of the community to receive public services.

B. Acceptability of Progressively Developed Construction Housing Solutions

Progressively developed construction, i.e., the provision of a minimum housing solution (sites and services, piso-techo, core housing) with the potential for expansion and quality improvements is a new approach for the JNV/BEV. Therefore, it is not possible to state categorically that progressively developed construction will be accepted as a viable option for obtaining housing by the target group families. Nevertheless, there is strong evidence to indicate that the concept will in fact be accepted. As pointed out in section A.4 above, many target group families live in squatters' settlements and are already engaging in self-help construction activities (which can be assisted through home improvement loans). This type construction solution is attractive to low income families because: (i) it provides a minimal shelter solution while allowing beneficiary families to expand and/or improve their housing in the way and at the rate which they desire and can afford. It permits the beneficiary families to make most decisions about the quantity and quality of housing which they obtain; (ii) it reduces the cost of housing. Evidence from other Latin American countries demostrates that housing costs can be reduced by more than 25 percent by having the beneficiaries serve as their own contractors, buying materials and hiring labor, as well as providing their own labor. A number of studies by experts such as John F.C. Turner have demonstrated that, given security of tenure and reasonably stable income, families will make significant investments in housing through self-help progressive construction techniques.

The acceptability of progressively developed construction in JNV/BEV projects is also confirmed by evidence from the IBRD financed project in Guayaquil where piso-techo, core units and home improvements have been readily accepted by beneficiaries and by the Solanda project in Quito, where more than 6,000 families have applied for types of solutions which will involve self-help efforts to complete the houses.

C. Affordability and Willingness to Pay

The effective demand for housing provided through the JNV/BEV must be distinguished from the need for housing. While the determination of housing need is based upon judgements about the adequacy of existing housing, the effective demand for housing reflects the amount that households are willing and able to pay. In order to determine whether target group families will generate sufficient effective demand for the housing solutions provided, both affordability and willingness to pay must be analyzed.

1. Affordability

The affordability of housing is based on an a priori judgement about the maximum amount which families can afford to pay from their incomes. In its analyses of the Ecuadorean housing market JNV assumes that families can allocate a maximum of 25 percent of their income for housing. This percentage has also been employed by the IBRD in the housing projects which it has recently financed in Ecuador. Based on this criterion, the housing solutions proposed for financing under the project are affordable to the target population. Table V.3 presents data on the maximum loan amounts and solution costs which can be afforded by the target population, according to the income data presented in Table V.1.

Table V.3

Maximum Loan Amounts and Solutions Costs for 1983
(Sucres)

Income Percentile	Family Income	Monthly Payment	Maximum Loan Amounts*	Maximum Solution Costs**	Feasible Solution
0-10	1,863	466	36,363	45,454	home Improvements
11-20	2,722	680	53,090	66,363	home Improvements
21-30	3,484	871	68,002	85,003	sites and services, home improvements
31-40	4,319	1,080	84,320	105,400	sites and services, home improvements
41-50	5,184	1,296	101,184	126,480	piso-techo, sites and services, core, home improvements.

* assumes 15 percent interest, 25 year loan term.
** assumes the maximum downpayment of 20 percent.

The solutions proposed in the project are affordable to the target population. Families with the median income in 1981 (S/4,300) can afford a housing solution which costs S/126,000 in 1983. Families at the 30th percentile (S/2,880) could afford solutions which cost S/85,000. Comparing capacity to pay with the housing solutions to be financed under the project, the families with incomes between the 30th percentile and median will be eligible for piso-techo and core housing while families with incomes below the 30th percentile could acquire sites with services or home improvement loans.

2. Willingness to Pay for Housing

Few data exist which demonstrate the willingness and ability of low income families in Ecuador's secondary cities to pay for housing. In general, families in urban areas in developing countries spend anywhere from five to 40 percent of their income on housing which, after food expenditures, represents the largest expenditure in the household budget of low income families. 1/

On the basis of consumer surveys conducted by the Brookings Institution, the median income households in Quito paid some 23 percent of their incomes for housing (including principal dwelling, maintenance and others), while the global mean expenditure share was 33.7 percent. 2/ In spite of the low incomes of target population households, the data show that such households are willing to pay more for their housing in secondary cities in Ecuador than, for example, in Quito. Based on 1978 INEC figures, the payments made by median income families for housing (apparently rent only) can be indexed as follows:

Quito	100
Cuenca	108
Ambato	114
Riobamba	118
Latacunga	113
Esmeraldas	145
Babahoyo	110
Machala	109
Loja	119

SOURCE: INEC: household surveys for 1978, unpublished data.

These data are consistent with findings that the income elasticity for housing is less than 1. That is, low income families spend a greater percentage of their income on housing than do families with higher incomes. Data from a study of nine cities in Peru show that in 1970 families below the median who rented paid more than 20 percent of their income for rent while

1/ Orville Grimes, Housing for Low-Income Urban Families, John Hopkins U. Press, Baltimore, p. 30

2/ Musgrove, Philip: "Consumer Behavior in Latin America". The Brookings Institution, pages 129 and 301.

families above the median paid about 10 percent.[3/] This study also found that average expenditures on housing greatly understate the percentage of income paid for newly acquired housing. Rent controls and fixed mortgages over long periods of time mean that average housing expenditures calculated for all families are much less than the marginal expenditures for new housing increasing by families in the process of obtaining housing. Although not confirmed by available data, this phenomenon is undoubtedly occuring in Ecuador's secondary cities.

Based on the limited information available, USAID concludes that families will be willing to pay 25 percent of their incomes on housing and that the use of this percentage as the criterion for ascertaining affordability is reasonable.

3/ Robert Jordan "An Evaluation of Public Housing Policy in Peru". Ms, 1979. P. 189

BANCO ECUATORIANO DE LA VIVIENDA
PROJECTED BALANCE SHEET STATEMENT
YEARS 1982 THROUGH 1991
IN MILLIONS OF SUCRES

	12-31-1981	12-31-1982	12-31-1983	12-31-1984	12-31-1985	12-31-1986	12-31-1987	12-31-1988	12-31-1989	12-31-1990	12-31-1991
ASSETS											
Cash	366	13	43	104	177	195	565	983	1,450	1,962	2,527
Stocks and Bonds	851	966	1,131	1,246	1,361	1,476	1,241	956	971	986	1,001
Receivables	181										
Other Current Assets	359										
Loans											
Loans in Process	19	944	811	581	332	158	134	159	343	550	775
Mortgage Loans	4,626	5,825	8,733	11,942	15,464	18,949	22,982	26,959	31,466	37,037	43,865
Investments											
Land, Construction & Finished Units	5,091	4,991	4,827	4,621	4,371	4,072	3,715	3,715	3,715	3,715	3,715
Savings and Loan Associations Deposits	161	220	287	385	519	697	917	1,176	1,466	1,76[illegible]	2,080
Other Investments	232	232	212	232	232	212	232	232	232	23[illegible]	232
Fixed Assets	271	341	371	396	421	446	471	496	521	546	571
Accumulated Depreciation	106	149	192	235	278	321	364	407	450	493	536
	165	192	179	161	143	125	107	89	71	53	35
Insurance Department	7	38	69	100	131	162	193	224	255	286	317
Branches	225	225	225	225	225	225	225	225	225	225	225
Deferred Assets	140	182	192	202	213	224	236	248	260	272	284
TOTAL ASSETS	12,425	13,828	16,729	19,801	23,170	26,515	30,547	34,966	40,654	47,085	55,056
LIABILITIES AND NET WORTH											
Savings	2,557	3,257	4,434	5,803	7,384	9,197	11,261	13,595	16,217	19,144	22,391
Short term Liabilities	446	195	195	195	195	195	195	195	195	195	195
Long term Liabilities											
Loans Payable	1,410	2,195	3,097	3,545	3,735	3,566	3,360	3,140	2,906	2,656	2,386
Mortgage and Real Estate Bonds	789	1,045	1,468	2,020	2,693	3,247	4,322	5,384	7,104	8,989	11,782
Other	2,450	1,909	1,909	1,909	1,909	1,909	1,909	1,909	1,909	1,909	1,909
Deferred Liabilities	827	827	827	827	827	827	827	827	827	827	827
TOTAL LIABILITIES	8,479	9,428	11,930	14,299	16,743	18,941	21,874	25,050	29,158	33,720	39,490
NET WORTH & RESERVES											
Paid-up Capital	1,606	1,606	1,606	1,606	1,606	1,606	1,606	1,606	1,606	1,606	1,606
GOE Contributions	1,923	2,469	2,776	3,083	3,390	3,697	4,004	4,311	4,618	4,925	5,232
Reserves	582	582	582	582	582	582	582	582	582	582	582
Accumulated Profit (Loss)	(165)	(257)	(165)	231	849	1,689	2,481	3,417	4,690	6,252	8,146
Total Net Worth & Reserves	3,946	4,400	4,799	5,502	6,427	7,574	8,673	9,916	11,496	13,365	15,566
TOTAL LIABILITIES & NET WORTH	12,425	13,828	16,729	19,801	23,170	26,515	30,547	34,966	40,654	47,085	55,056
KEY INDICATORS											
Current Ratio	3.9	5.0	6.0	6.9	7.9	8.5	9.3	9.9	12.4	15.1	18.1
Debt: Equity	2.1	2.1	2.5	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5
Debt: Assets	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	
Profit	(232)	(92)	92	396	618	840	792	936	1,273	1,562	1,894
Returns on Assets	***	***	.5	2.0	2.7	3.2	2.6	2.7	3.1	3.3	3.4
Returns on Equity	***	***	1.9	7.2	9.6	11.1	9.1	9.4	11.1	11.7	12.2

• Note: On May 13, 1982, subsequent to the preparation of this table, the sucre was devalued from S/ 25 to S/ 33 per dollar. The only item in the balance sheet significantly affected by the devaluation is long-term loan liabilities which include external as well as domestic loans. If the "worst case" assumption is made that all long-term loans received by BEV are external (i.e., dollar-denominated), the effect is to increase cumulative liabilities over the 1982-1991 period by 4.4 percent and to raise the average debt-to-equity ratio from 2.5 to 2.6. Therefore, accounting for devaluation does not alter the basic conclusion that BEV is and will remain a financially sound institution.

BANCO ECUATORIANO DE LA VIVIENDA
PROJECTED STATEMENT OF INCOME
YEARS ENDING 1982 THROUGH 1991
IN MILLIONS OF SUCRES

	12-31-1981	12-31-1982	12-31-1983	12-31-1984	12-31-1985	12-31-1986	12-31-1987	12-31-1988	12-31-1989	12-31-1990	12-31-1991
INCOME											
Interest Earned	538	765	1,121	1,499	1,918	2,400	2,750	3,173	3,756	4,358	5,041
Less: Interest Paid	461	500	846	1,015	1,184	1,290	1,579	1,826	2,038	2,314	2,624
Net Interest Earned	77	265	275	484	734	1,110	1,171	1,347	1,718	2,044	2,417
OTHER INCOME	8	106	159	249	247	157	81	81	81	81	81
TOTAL INCOME	85	371	434	733	981	1,267	1,252	1,428	1,799	2,125	2,498
EXPENSES											
Administrative Expenses	415	466	410	410	410	443	478	517	558	602	650
Less: Indirect Cost Allocation	37	46	111	116	90	59	61	68	75	82	89
Net Administrative Expenses	378	420	299	294	320	384	417	449	483	520	561
Net Profit or (Loss) before other expenses	(293)	(49)	135	439	661	883	835	979	1,316	1,605	1,937
OTHER EXPENSES											
Depreciation	26	43	43	43	43	43	43	43	43	43	43
Miscellaneous	4	--	--	--	--	--	--	--	--	--	--
Total Other Expenses	30	43	43	43	43	43	43	43	43	43	43
Net Profit or (Loss)	(323)	(92)	92	396	618	840	792	936	1,273	1,562	1,894
Key Indicators											
Profit/Income (%)	---	---	21	54	69	66	63	66	71	74	76
Net Admin/Income (%)	448	113	69	40	33	30	33	31	27	24	23

NOTE: On May 13, 1982, subsequent to the preparation of this table, the sucre was devalued from S/ 25 to S/ 33 per dollar. The effect of the devaluation on BEV's profitability was to increase the sucre value of interest which BEV pays on external (i.e., dollar denominated) debt. Using the detailed data available from BEV's budget, it was found that the bulk of interest paid is on domestic liabilities (primarily savings deposits and long-term loans). Prior to devaluation, interest due on external debt comprised 6.7 percent of total BEV interest payments. As a result of the devaluation, the total sucre value of BEV interest payments in 1982 rose by 2.2 percent, with external payments comprising 8.6 percent of the total. Therefore, the profit figures and ratios presented in the table would be only marginally affected if adjusted for the devaluation.

BEV - ESTIMATED WEIGHTED AVERAGE
COST OF RESOURCES
(millions of sucres)

Resources	1.982 Amount	1.982 Cost %	1.982 Cost sucres	1.986 Amount	1.986 Cost %	1.986 Cost sucres
Savings	3,257.0	13.0	423.4	9,197	13.0	1,195.6
Local Financial	1,688.2	9.0	151.9	2,710.2	11.0	394.2
External Financing (OLD)						
IDB	298.9	5.0	14.9	298.9	5.0	14.9
AID	118.2	4.0	4.7	118.6	4.0	4.7
FHLB	278.1	9.0	25.0	278.1	9.0	25.0
External Financing (NEW)						
IBRD I	226.2	7.95	17.9	564.1	7.95	44.8
IBRD II	166.3	11.6	19.2	1,177.4	11.60	136.5
A.I.D. Solanda	186.1	12.0	22.3	660.0	12.00	79.2
Bonos (Obligatorios)	1,045.0	7.0	73.1	3,247.0	12.00	389.6
Bonos Hipotecarios	191.0	15.0	28.6			
Capital/Reserves	4,400.0	0	------	7,577.0	0	------
TOTALS	11,855.0		781.0	25,828.3		2,284.5
Weighted Average Cost		6.7%			8.8	
A.I.D. 006				825.0	12.0	99.0
TOTALS				26,653.3		2,383.5
Weighted Average Cost with A.I.D.-006					8.9	

Note: The sucre values of all external loans have been adjusted upward to reflect the May 13, 1982 devaluation.

Project 518-HG-006 - Ecuador
Cash Flow Protection
1983 - 1992

LOAN CURRENCY: SUCRES
AMOUNT IN THOUSANDS

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	TOTAL
INFLOW											
Balance Fwd.		40,228-	97,652-	145,266-	109,016-	135,787-	159,633-	182,932-	199,051-	220,194-	
Down Payments											
New Construction	35,244-	38,919-	26,197-	13,474-	9,800-	12,250-	14,699-	16,904-	18,374-	20,212-	206,073-
Home Improvements											
HG Loan Proceeds											
New Construction	264,000-	198,000-	198,000-								660,000-
Home Improvements	41,250-	49,500-	74,250-								165,000-
Long-Term Recuperation											
New Construction											
Principal	2,917-	6,311-	8,753-	10,101-	11,654-	13,679-	15,572-	17,982-	20,758-	23,962-	131,48[illegible]
Interest	47,199-	93,922-	116,538	115,191-	113,637-	111,813-	109,718-	107,308-	104,532-	101,329-	1,021,1[illegible]
Home Improvements											
Principal	5,597-	12,063-	19,539-	22,584-	26,102-	30,162-	34,852-	24,867-	13,332-	-	18[illegible],09[illegible]-
Interest	9,255-	17,639-	25,015-	21,970-	18,452-	14,392-	9,702-	4,835-	1,519-	-	122,779-
Long-Term Financing Recuperation											
New Loans (Re-Flows)											
New Construction											
Principal			304-	1,063-	2,347-	3,526-	5,085-	7,362-	9,918-	12,965-	42,570-
Interest			4,921-	16,355-	34,230-	46,985-	62,645-	81,470-	102,951-	126,059-	475,816-
Home Improvements											
Principal			814-	2,846-	6,279-	10,750-	13,378-	19,004-	25,716-	31,555-	110,342-
Interest			1,349-	4,367-	8,869-	11,489-	14,768-	17,625-	21,042-	23,862-	103,371-
TOTAL INFLOW	405,462-	416,354-	475,680-	207,951-	231,370-	254,846-	280,619-	297,357-	318,142-	339,944-	
Cumulative	405,462-	821,816-	1,297,496-	1,505,447-	1,736,817-	1,991,663-	2,272,282-	2,569,639-	2,887,781-	3,227,725-	3,227,725-
Available	40,228-	97,652-	145,266-	109,016-	135,787-	159,633-	182,853-	199,051-	220,194-	243,337-	

OUTFLOW												
Initial Costs 100%	9,603-											9,603-
Construction Financing Direct Cost	264,000-	198,000-	198,000-									660,000-
Construction Financing New Loans Direct Cost		31,680-	73,920-	116,160-	84,480-	105,600-	126,720-	145,728-	158,400-	174,240-		1,016,928-
Home Improvements Direct Cost	55,000-	55,000-	55,000-									165,000-
Home Improvements New Loans Direct Costs		7,920-	18,480-	29,040-	21,120-	26,400-	31,680-	36,432-	39,600-	43,560-		254,232-
Long-Term Financing New Loans												
HIC Loan Repayment Interest Principal	36,630-	66,330-	82,665-	99,000-	99,000-	99,000-	99,000-	99,000-	99,000-	99,000-		878,625-
RATIOS:												
Debt Service Ratio	1.8	2.0	2.1	1.9	2.2	2.5	2.7	2.8	3.0	3.2	2.9*	
Debt Ratio	.82	.78	.77	.70	.66	.62	.58	.53	.48	.44		
Debt-to-Equity Ratio	4.59	3.52	3.41	2.29	1.93	1.62	1.35	1.12	.94	.79		
Times Interest Earned	1.5	1.7	1.8	1.6	1.8	1.9	2.0	2.1	2.3	2.5		
Percentage of Return												
Return on Equity		68%	41%	24%	21%	20%	19%	18%	18%	18%		
Return on Assets	30%	21%	17%	14%	14%	14%	14%	14%	14%	14%		
Total Outflow	365,233-	358,930-	428,065-	244,200-	204,600-	231,000-	257,400-	281,160-	297,000-	316,800-		
Cumulative	365,233-	724,163-	1,152,228-	1,396,428-	1,601,028-	1,832,028-	2,089,429-	2,370,588-	2,667,588-	2,984,388-		2,984,388-
Surplus (Deficit)	40,228-	97,652-	145,266-	109,016-	135,787-	159,633-	182,853-	199,051-	220,194-	243,337-		

*LOAN AMORTIZATION STARTS

Project 518-HG-006

Cash Flow Projection

ASSUMPTIONS

1. FINANCING TERMS

Ministry of Finance to Housing Bank

Amount of loan	$ 25,000,000
Rate of exchange	S/. 33.00 = US$1.00
Total in local currency	S/. 825,000,000
Interest rate	12%
Payment frequency	Semi-annual
Grace period	10 years (20 payments)
Amortization period	20 years (40 payments)
Semi-annual payment	
Grace Period	S/. 49,500,000
Amortization Period	S/. 54,830,767

Housing Bank to Beneficiaries
New Construction

Amount of loan	$ 20,000,000
Rate of exchange	S/. 33.00 = US$ 1.00
Total in local currency	S/. 660,000,000
Interest rate	15 %
Payment frequency	Monthly
Construction period	2 1/2 years
Amortization period	20 years (240 payments)
Monthly payment	S/. 8,690,811
Downpayment	10 %

Home Improvements

Amount of loan	$ 5,000,000
Rate of exchange	S/. 33.00 = US $ 1.00
Total in local currency	S/. 165,000,000
Interest rate	15 %
Payment frequency	Monthly
Construction period	3 years
Amortization period	7 years
Monthly Payment	S/. 3,183,965
Downpayment	---

2. DISBURSEMENT SCHEDULE: HG 75% participation

NEW CONSTRUCTION

Month / Year	Amount	Eligible costs	Advance Liquidation	Balance
1/1983	$5,000,000	--	---	$ 5,000,000
7/1983	3,000,000	5,340,000	1,000,000	4,000,000
1/1984	3,000,000	5,340,000	1,500,000	2,500,000
1/1985	3,000,000	5,340,000	2,000,000	500,000
7/1985	3,000,000	5,340,000	-0-	-0-
7/1985	3,000,000	5,340,000	-0-	-0-
	$20,000,000	$26,700,000	$5,000,000	-0-

HOME IMPROVEMENTS

Month / Year	Amount	Eligible costs	Advance Liquidation	Balance
1/1983	$ 500,000	---	---	$ 500,000
7/1983	750,000	$1,112,000	$ 100,000	400,000
1/1984	750,000	1,112,000	100,000	300,000
7/1984	750,000	1,112,000	100,000	200,000
1/1985	750,000	1,112,000	100,000	100,000
7/1985	750,000	1,107,000	100,000	-0-
12/1/1985	750,000	1,107,000	-0-	-0-
	$ 5,000,000	$ 6,667,000	$ 500,000	- - -

3. INVESTMENT - DIRECT COSTS (Thousands of Sucres)

NEW CONSTRUCTION

Year	Amount	US$
1983	264,000	8,000,000
1984	264,000	8,000,000
1985	132,000	4,000,000
	S/. 660,000	$ 20,000,000

HOME IMPROVEMENTS

Year	Amount	US$
1983	55,000	$ 1,666,667
1984	55,000	1,666,667
1985	55,000	1,666,666
	S/. 165,000	$ 5,000,000

Cost estimates for A.I.D. Grant-funded activities

I. Long-term Technical Advisor (Total A.I.D. funding: $115,000)

	Year 1	Year 2	Year 3	Total
Salary	$22,500	$25,000	$27,500	$ 75,000
Field vehicle (c.i.f.)	13,000	-	-	13,000
Vehicle operation (gasoline, maintenance, and insurance)	2,500	2,500	3,000	8,000
Travel and per diem	5,500	6,000	7,500	19,000
TOTAL	43,500	33,500	38,000	115,000

II. Design Competitions (Total A.I.D. funding: $75,000)

Publicity	$ 1,000
Fees of panelists	3,000
Reimbursement of costs of winning design	6,000
Construction of models	13,000
Publication/dissemination of Report on Results	2,000
Total Unit Costs	25,000
x number of competitions	3
Total	75,000

III. Municipal Studies (Total A.I.D. funding $100,000)

Ecuadorean professional staff (8 p.m. at $1,800)	$ 14,400.00
Travel and perdiem	6,600.00
Office Support and Overhead	4,000.00
Unit cost	25,000
x number of studies	4
Total	100,000