

PDKAM565

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT DATA SHEET

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

Amendment Number: 2

DOCUMENT CODE: 3

COUNTRY/ENTITY: Ecuador

4. BUREAU/OFFICE: IAC

5. PROJECT NUMBER: 508-016-007

5. PROJECT TITLE (maximum 40 characters): National Shelter Delivery System Program

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 01, DD 31, YY 91

7. ESTIMATED DATE OF OBLIGATION (Under "B" below, enter 1, 2, 3, or 4):
A. Initial FY: 89, B. Quarter: 3, C. Final FY: 91

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

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. LIC	D. Total	E. FX	F. LIC	G. Total
AID Appropriated Total						
(Grant)	(0)	(0)	(0)	(855)	(145)	(1,000)
(Loan)	(30,000)	(0)	(30,000)	(40,000)	(0)	(40,000)
Other U.S.:						
1. Host Country			0		21,200	21,200
2. Other Donor(s)						
TOTALS	30,000	0	30,000	40,855	21,200	52,200

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) SE	723	501		1,000				1,000	
(2) HE	723		502		30,000	10,000			40,000
(3)									
(4)									
TOTALS				1,000	30,000	0	10,000	1,000	40,000

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

11. SECONDARY PURPOSE CODE

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

A. Code: 00, 000P

B. Amount: 41,000, 5,000

13. PROJECT PURPOSE (maximum 480 characters):

To increase the supply of low cost housing and other shelter services by assisting the GOE to implement the shelter component of its National Development Program.

14. SCHEDULED EVALUATIONS

Interim: MM 03, YY 93; Final: MM 06, YY 91

15. SOURCE/ORIGIN OF GOODS AND SERVICES: 000, 941, Local, Other (Specify)

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

The purpose of this amendment is to provide an additional \$10 million in Housing Guaranty (HG) authority for the financing of infrastructure projects in low-income urban neighborhoods in Ecuador.

BEST AVAILABLE DOCUMENT

17. APPROVED BY: Frank Almaguer, Director USAID/Quito

Signature: *Frank Almaguer*

Title: Frank Almaguer, Director USAID/Quito

Date Signed: MM 03, DD 11, YY 93

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

**PROJECT PAPER SUPPLEMENT
NATIONAL SHELTER DELIVERY SYSTEM PROGRAM**

I. PROJECT BACKGROUND

A. Current Status of the Shelter Sector

Availability of housing and essential urban services for low income families has long been an important issue in Ecuador. That this should be so is not surprising, particularly in light of Ecuador's high national growth rate (2.62% p.a.) and even higher urban growth rates:

**TABLE I
POPULATION GROWTH RATES***

	1950-62	1962-74	1974-82
NATIONWIDE			
Ecuador	2.95	3.10	2.62
Urban	4.73	4.47	4.60
Rural	2.12	2.24	1.04
URBAN			
Quito	4.40	4.60	4.34
Guayaquil	3.66	4.14	4.44
Secondary Cities	4.31	4.64	4.83

*Instituto Nacional de Estadística y Censo (INEC)

There are two main sources which produce housing in Ecuador. One source, which we can characterize as the "formal sector", is made up of the Savings and Loan (S&L) industry, the Social Security System (which has traditionally been a major source of credit to middle-income families), and the Ecuadorian Housing Bank and the National Housing Board (JNV/BEV). The other source, far less easy to define, is a parallel and largely informal process.

The performance and efficiency of the first system, the "formal" one, has generally improved over the past two decades, except that private participation, including that of the S&Ls, has dropped off greatly since high inflation appeared in the late 1970s. The production of low-cost housing has been the responsibility of the JNV/BEV, and the performance of that organization has improved significantly over the past few years:

TABLE II

PRODUCTION OF HOUSING SOLUTIONS, JNV/BEV

	Aug/79-Jul/84	Aug/84-Jul/88
New Homes	33.262	46.599
Home Construction Loans	4.974	2.200
Home Improvement Loans	1.402	36.965
TOTAL	<u>39.638</u>	<u>85.844</u>

The table above demonstrates that the performance of the JNV/BEV has improved not only in terms of absolute numbers of housing units produced, but also in terms of the type of activity. In particular, the sharp increase in home improvement lending represents a positive program development that permits the GOE to support the individual efforts of low-income families at a much lower per-capita cost than the construction of new dwellings.

The demand for additional housing in urban areas is so strong, however, that despite improvements in formal sector performance, the gap between production and demand is growing. This demand is met largely by the "informal" sector, which provides most of the housing used today by low-income families in Ecuador. This is clearly evident in looking even quickly at some of the dimensions of the housing sector in Quito and Guayaquil.

During the 1974-1982 period approximately 171,000 new housing units were produced in Quito and Guayaquil, to meet the shelter needs of those cities. Only 35% of those units were formally registered and recorded, the balance being produced "off the record". Thus, well over half the new housing added to the stock in Ecuador's major cities was developed by an "informal" process that operates at the margin of (and often despite) the institutions, procedures and regulations which in theory are in place to match housing production with demand.

Since the supply of housing in existing neighborhoods is fairly inelastic, and low-cost inner-city housing is, by and large, saturated, much of the growth of Ecuador's cities is in the outlying areas, where "spontaneous settlements" develop to meet the needs of low-income families who cannot afford the least-expensive solutions normally offered in formal, registered, proper "residential" developments.

In summary, then, the traditional approach on the part of the "formal sector" to the production of housing turns out to be one which, effectively, excludes from the possibility of participation more families than it includes. Those families, left largely to solve their own shelter problems, participate in the operation of the vigorous "informal sector" which offers affordable (if imperfect) answers to their needs.

3

It is at this point that an ironic paradox begins to operate: the informal settlements came into being because none of the formal ones developed with municipal permits and approval were affordable to poor families. However, since the informal settlements do not meet municipal standards for residential areas (types of facilities, planning requirements, etc.) the municipalities do not recognize them as legal, and so refuse to extend urban services: water, sewer, street lighting, and others. Since they do not acknowledge the legitimacy of the settlements, municipalities cannot charge taxes or other important fees to make it possible to provide services. And, whether or not the municipalities consider these settlements legal or not, the families involved press with increasing urgency for the attention they need: basic, essential services, with water and sewer at the top of the list of priorities.

Once this has happened, the municipalities are irreversibly involved in the process, as it is only the municipalities that can correct the imperfections in the solutions which the informal sector has provided: to address the lack of clear titles, to provide access for public transportation to serve the community, to provide basic infrastructure services, trash collection, social services, etc. Annex 1 tells this story more fully; it recounts the major findings of a recent Mission study which looked at the origin and development of "Lucha de los Pobres", a representative spontaneous settlement in Quito.

On a national level, GOE attention remains focussed largely on more traditional definitions of housing, with large international credits funnelled through the BEV to finance "low cost housing" programs. Within the context of traditional programs, the emphasis is much improved, with greater attention given to sites-and services, construction credits, and home improvement loans. But it is largely to the municipal authorities that the problems of very low-income families fall, as it is the municipal authorities who are confronted with those problems on a daily basis-- with committees and delegations from the growing numbers of informal settlements demanding to be recognized and served. And, it should also be pointed out, asserting their willingness to be taxed and otherwise held accountable for their existence, as long as they are accorded reasonably fair treatment.

Although not all municipal or national leaders have come to accept the permanence to (and their de-factor partnership with) spontaneous settlements in their cities and countries, most have: heavy-handed programs of "slum clearance" and "squatter relocation" are largely anachronisms that have been abandoned in recognition that they solved few if any problems, and at high economic as well as social cost.



Vanishing, too, is much of the language that went with the old prejudice: the "villas miserias", "barriadas", "ranchos". Even the "barrios marginales" are now "periferales" or "informales".

These are healthy and positive changes; they bespeak greater awareness of a shared interest in the success or failure of the institutions that keep cities decent places to live.

Recognizing that low-income families will resolve their housing needs, a number of municipal administrators have concluded that the only reasonable alternative is for them to find a way to reconcile these interests: to adjust their traditional definition of what is acceptable so they can incorporate the needs of these growing areas into a rational municipal process. At the same time, providing legitimacy to the spontaneous settlements (and therewith agreeing to provide municipal services as well) provides a basis on which the municipality can extract a degree of cooperation from the families whose presence is thereupon acknowledged and accepted.

So, having come to terms with the permanence and de-facto legitimacy of spontaneous settlements in their cities, municipalities are anxious to find ways to provide the basic services that are needed. They recognize, as do community leaders in most of the settlements, that creativity and patience are going to be very important elements in arriving at solutions to the problems facing them. Financial resources, of course, are also an important part of the solution.

In this section we have highlighted just a few of the salient characteristics of the shelter sector today. Despite improvements in the performance of the traditional formal sector institutions producing housing, the demand continues to outstrip the formal supply. In many cases, "housing" has been too narrowly defined--- and, when so defined, it is not a solution that is accessible to most poor families.

The "informal" sources of supply increasingly provide the production that fills the gap. In contrast to the formal institutions, the informal system offers families lower-cost solutions and it provides them more quickly. By providing no more than empty lots in many cases, it also makes maximum utilization of families' abilities to build their own houses. Unlike the formal system, though, it is ill-suited to provide those basic urban services which are the natural arena of municipal action: water, sewer, streets, trash collection, etc.

Very unsettling evidence of worsening coverage in Ecuador's urban areas confirms that:

- the informal sector is increasingly the source of most new shelter put on the market today (not a phenomenon which is bad in itself, but which is a problem since that sector is poorly-equipped to deal with infrastructure needs)
- current institutional relationships work against the development of low-cost housing which meets an acceptable minimum standard of habitability:

TABLE III

DWELLING UNITS WITHOUT PIPED WATER
QUITO AND GUAYAQUIL

	1974	1982	1988
Quito	9%	11%	24%
Guayaquil	21%	32%	76%

These findings strongly suggest that policies which encourage the flow of resources into infrastructure provision and extension of home improvement credit would achieve greater impacts than other investments in the sector, in large part because they would greatly increase the effectiveness of other (private) investments now being made.

Ecuador's shelter sector policies have, over time, come increasingly to reflect this perspective. The GOE is addressing its shelter needs from several perspectives. The most important of these will be discussed briefly hereafter, to then return to the Mission's interest in supporting a number of promising municipal initiatives by providing supplemental funding for the National Shelter Delivery System Program.

B. Other Donor Programs

Several other donor organizations play important roles in the shelter sector in Ecuador. Some of the most significant ones follow:

1. World Bank

Guayaquil and Guayas Province Water Supply Project.

The purpose of this project is to improve the water supply service levels in Guayaquil and strengthen the Water Supply Company in Guayaquil (EMAP-G) by improving its managerial, technical, and financial performance. The total cost of this

6

project is \$46.2 million, of which \$37.3 million will be used to construct civil works, \$5.6 million to purchase equipment and material, and \$3.3 million for technical assistance and training. This major infrastructure program will do a great deal to improve Guayaquil's current shortage of suitable potable water.

Second National Low Income Housing Project (IBRD 2898-EC). The purpose of this project is to increase the supply of low-income housing, introduce new mortgage instruments and interest rate policies, improve BEV's administrative and financial capability, and foster more private sector participation. The total cost will be \$85.7 million, of which \$71.4 will be used to finance 12,500 new shelter solutions and 15,000 home improvement loans. Project implementation is contingent on BEV's adoption of an adjustable rate mortgage system. The project and loan agreements were signed during the past GOE administration, as well as subsidiary agreements between the BEV and the Ministry of Finance, the JNV, and the GTZ (for technical assistance).

The BEV legal department is concluding a review of the program implementation documents, a process which should be concluded in the next few months. An adjustable mortgage system is now in use by the BEV (introduced with the AID 005 and 006 loans) and the BEV expects that the IBRD will accept the same system for this program.

With this project, the World Bank will help the GOE consolidate many of the significant advances in policy which the Mission and the GOE achieved with AID's earlier BEV programs, described in Section C.

2. Interamerican Development Bank

Urban Development Project. The IDB recently approved a loan of US\$57.2 million to BEV/JNV to: a) finance the purchase and installation of infrastructure for approximately 32,000 lots, and b) provide loans for building materials for basic housing units on the lots. In addition, \$644,000 of this loan will be used to strengthen BEV/JNV's operations and to carry out a study of the housing finance system in Ecuador and BEV/JNV's role in this system. Local financial contributions (primarily land) will add another \$6.4 million to the project resources.

BEV has identified 26 projects to be developed under this project. So far, six are under development, while another four are ready for bids. It is still too early to initiate the materials purchase component of the project, since no serviced lots have been completed and sold. The technical assistance component will be implemented in conjunction with other work of the GTZ, which is working closely with the BEV's technical and planning sections.

7

As is true also of the World Bank/BEV program described above, this large credit will help carry forward the momentum of change initiated at the BEV with the AID-supported Solanda and National Low Income Housing programs, in moving the nature of BEV programs away from completed housing units and into more emphasis on sites and services, progressive development, and home improvement lending.

Water Supply System Improvements-Quito. The IDB is currently financing a multi-component project to improve the water supply and distribution system in Quito. Total project cost will eventually be about \$37 million, of which the IDB will finance \$28 million with a loan to the GOE. The following are the primary components of the program:

- I. The expansion of the "Puengasí" water system. This will be completed by the end of 1988. It consists of the incorporation of a number of existing local sources of water to the system, expansion of the capacity of the Puengasí treatment plant, and the extension of an additional 22 Km of trunk lines will provide an additional 400 liters of water per second to the existing "Puengasí" system. This increase will supply the additional volume of water needed to operate most of the projects which the Municipality plans to install in the near term.
- II. Improvement in the water authority's capacity to meter water and bill for the service. This includes:
 - a) Purchase of water meters: EMAP-Q has purchased 27,000 meters, which the company will install over the next two years.
 - b) Establishment of a repair shop for water meters.

The addition of these new meters (and better maintenance of existing ones) will help EMAP-Q increase its revenues through better tariff recovery, aside from other increases from changes in the tariff structure. This phase will be completed by the end of 1990.

These two phases are of the most immediate interest to the municipality for its short-term upgrading programs.

- III. Design of first stage of the Mica-Tambo water system and construction of access roads and field camps. The Mica-Tambo system is a long-range project and is not expected to come on-line for 15 years.

8

Second Stage of Sewerage System and Fill Project for the Western Sector of Guayaquil:

The purpose of this project is to improve the sewerage and storm water drainage system in a western suburb of Guayaquil.

The project consists of: 1) filling 409 ha. in western Guayaquil, 2) construction of both sanitary sewerage and storm water drainage systems for 600 ha. in this area.

The total amount of the loan is \$24 million. Project progress has been delayed by problems with the bidding process for the work. Some of the equipment purchased under the loan is already in country. The IDB is currently trying to expedite the contracting process.

A review of the projects supported by other donors indicates that other donors supply only small amounts of resources for water supply and sewerage infrastructure at the neighborhood level in informal, marginal neighborhoods. The absorptive capacity of municipal infrastructure authorities undertake these types of infrastructure projects in marginal areas is fairly high, especially since the GOE itself does not possess sufficient funds to address the infrastructure needs in this area.

3. The Papallacta Project

In addition to the IDB-financed program, a group of private lenders (Argentina, Germany, Colombia and Italy) is working with the GOE on the Papallacta system, the first stage of which will be in service in 1990. The cost for the first stage, which will add 4 cubic meters of water per second to Quito's water supply, is estimated at around 121 million dollars. Another 2.5 cubic meters per second are expected from Papallacta's second stage, which should serve the city's needs until the year 2000.

A number of the neighborhoods located in higher zones of Quito will not be served until the first phase of the Papallacta system is operational in 1990.

C. Brief History of AID Involvement in the Shelter Sector in Ecuador

With some variations in focus, successive GOE administrations have agreed on the importance of addressing the problems in the urban shelter sector and have worked with a variety of multi- and bilateral agencies to improve both performance and efficiency. AID has worked closely with the GOE on a number of programs, providing authority for over \$75 million in Housing Guaranty loans to finance low-cost shelter production.

9

In addition to the National Shelter Delivery System Program, AID has provided support for two other major recent programs: the Solanda Project and the Nationwide Low Income Housing Project, which have been supported by AID loans 518-HG-005 and 006, respectively. Both programs are nearing completion; the Mission expects that by the end of the calendar year both projects' escrows and advances will have been liquidated.

1. Solanda Integrated Urban Development Program

In 1980 AID authorized a \$20 million HG loan (518-HG-005) for Solanda, a single large project in Quito. Solanda, executed by the Ecuadorian Housing Bank (BEV) and the National Housing Board (JNV), provides homes to some 5,600 low income families and served to help AID and the GOE develop less-costly approaches to providing low cost shelter: progressive house designs, reduced municipal standards, graduated loan payment plans and integral home improvement credits were all introduced to BEV's programs with this project. AID expected to finance the mortgage loans of 4,500 families in this project; the Mission expects that it will pass that target number slightly, and also provide credit for about 692 home improvement loans within the project.

The BEV has adjudicated all the houses in Solanda, the last few hundred families are moving into their houses as they finish up their paperwork with the municipality, and the BEV is clearing up the remaining advances of funds (\$5 million) and liquidating the escrow balance (\$2 million). The Mission anticipates that all funds will have been disbursed from escrow and all project advances liquidated by the end of December 1988.

2. Ecuador Low Income Housing Program

In 1982 AID and the GOE executed a follow-on agreement, also with the JNV/BEV. This program, with loan 518-HG-006, (\$25 Million) reinforced the progress made with Solanda and also supported GOE efforts to strengthen the outreach of its public sector housing organizations. In addition, the 006 program gave strong support to BEV's nationwide low-cost home improvement loan program, which has proved to be very effective in reaching low-income families. This program has \$2 million now in escrow and a project advance of \$2.7 million. The activities have nearly all been completed and we expect that the HG-006 loan, too, will be completely used up by the end of the year.

As of August 1988, the program had financed 11,177 shelter loans (5,670 mortgage loans and 5,507 home improvement credits) surpassing by nearly 700 the original projections. Several hundred more will have been completed and recorded by year's end when the 006 is fully disbursed.

10

3. The National Shelter Delivery System Program

In 1984, AID and the GOE agreed to a third program: a \$30 million loan (518-HG-007) to support the development of a discount facility--the "Financial Fund for Housing"--at the Central Bank, for the purpose of facilitating and increasing the participation of actors other than the JNV/BEV in the delivery of housing and related services to low-income families. This program is under way at this time. This program has an ambitious agenda. It has achieved important elements of that agenda, but has important contributions still to make to improve the performance of the shelter sector. That is the reason for this proposed Project Paper Supplement.

a. Description and History of the Program

AID authorized the National Shelter Delivery System Project (518-HG-007) in September, 1984, in response to a request from the GOE for additional support in carrying out its shelter programs. At that time, AID and the GOE agreed on a strategy of focussing on the expansion of the supply of low cost housing as well as re-orienting the housing sector to a more market-driven approach.

This Project was designed to help the GOE address two major problems in the sector: (1) the low absorptive capacity of the public sector to use additional resources and (2) the absence of long-term financing within the private sector finance system for low-cost housing. With the support of a \$30 Million HG authorization, the Central Bank has established a source of long-term funding available to purchasers of shelter produced by both private and public entities to finance shelter solutions for low income urban families.

AID provided HG loan authorizations of \$30 million for this program to "improve the quality of life for lower income families by increasing their access to upgraded and new shelter solutions". Together with local resources to be provided by the GOE, participating financial institutions, and beneficiaries themselves, a total of \$51.2 million is available to carry out the objectives of the program (See Table IV).

TABLE IV

NATIONAL SHELTER DELIVERY SYSTEM PROGRAM RESOURCES

HG loan proceeds	\$ 30.0 Million
GOE Counterpart	10.0 Million
Intermediaries' Counterpart	8.6 Million
Beneficiary Contributions	2.6 Million
TOTAL	<u>\$ 51.2 Million</u>

11

The Project Paper projected that 19,000 families with incomes below the urban median would benefit directly from access to these resources. The implementing vehicle is the Financial Fund for Housing (FFH), a discount facility established at the Central Bank of Ecuador (BCE) to discount eligible loans and mortgages generated by qualified Intermediary Financial Entities (IFE) from both the public and private sectors.

In the interest of stimulating creativity and establishing a receptive financial environment for new approaches, the FFH imposed very few limitations on interested participants. No geographic limitations were established, although it was expected that 50% of the resources would be consumed by the Quito and Guayaquil markets. No "unit typologies" were established as conditions to participate: developers were encouraged to design and develop any type of shelter solution as long as it was affordable and attractive to the target population.

Both AID and the GOE recognized that even the least expensive housing units that could be developed were likely to be too costly for the lowest-income families, so alternative approaches were also encouraged: loans for individual home improvements and credits for municipal and neighborhood upgrading were expected to reach lower-income families. Extension of basic urban infrastructure, especially water, was an important activity in reaching these families.

Increased access to new and upgraded shelter solutions, pilot projects using lower-cost materials, improvement programs for inner-city tenements -- these and other activities are part of the project's scope. Support to and through cooperative organizations and municipalities is also contemplated, in recognition that credit unions, housing cooperatives and local governments deliver important services to families not well-served by more traditional "formal sector" housing organizations.

As soon as the project was authorized, the Mission and the GOE undertook development of the FFH at the Central Bank. A considerable number of steps had to be taken to create this new financial mechanism at the Central Bank.

The Implementation Agreement was signed in January, 1986. Agreements were developed with the National Monetary Board for this new Central Bank activity. A Fiscal and Financial Agency Agreement was developed by the Central Bank and the Ministry of Finance, to enable the BCE to act as the implementing agency for the program. Once the broad

implementation framework was in place, the BCE went on to create the rest of the operational instruments which the FFH needed for its operation (See Annex 2).

b. Current Status of the Program

As indicated earlier, when AID and the GOE agreed to develop the National Shelter Delivery System Program they agreed also to impose as few restrictions as possible on the qualification of activities eligible for discount with the FFH. This was a conscious decision, to encourage private sector participation, creativity and flexibility in the use of the new line of credit, recognizing that many otherwise viable proposals and initiatives in the past had come to naught essentially because they did not meet some pre-determined standard.

The first generation of projects spawned by the creation of the FFH reflects this decision in several ways. On the one hand, permitting private sector builders to engage in activities somewhat similar to those they knew well was an important stimulus to their participation. On the other hand, since there were no restrictions requiring the BCE to distribute the funding among shelter products of different costs, the BCE did not have any reason to promote less-costly activities.

Private developers and builders were among the first to see a valuable resource in the FFH, and they brought together new programs which met the key objective of affordability to eligible families, although mostly at the very top of the allowable cost range.

Private developers now have underway a large volume of projects which will generate mortgages eligible to discount with the Financial Fund for Housing. Some of the developers are planning to channel their discounts through the BEV, although most are working with approved Intermediary Finance Entities in the private financial sector: commercial banks, savings and loans, and finance companies. Yet another group of projects is under development by the BEV/JNV with the expectation that funds will be available from the FFH to discount the mortgages which will be generated. Finally, there is another round of projects which, while also under development, is not as far advanced as the ones mentioned above.

This information is presented in detail in Annex 3, and summarized below in Table IV:

TABLE IV
STATUS OF FFH PROJECT PIPELINE AS OF 8/88
(VALUES CALCULATED AT S/500 PER US\$1)

PROJECT CATEGORY	NUMBER DEVELOPERS	NUMBER UNITS	VALUE OF SHELTER	HG PORTION OF FFH DISCOUNTS
A	13	7,210	16.4 MILLN.	\$9.4 MILLION
B	7	3,066	4.9	2.8
C	JNV	1,775	4.4	2.5
D	BEV	3,000	1.8	1.8
E	16	10,728	26.0	14.9
TOTAL	<u>36</u>	<u>25,779</u>	<u>53.5</u>	<u>31.4 MILLION</u>

CATEGORY A: Projects of private developers financing long term credits through private financial institutions. All projects are built or under construction. Some have been sold to beneficiaries, others are in active sales now.

CATEGORY B: Projects of private developers financing long-term credits through the BEV

CATEGORY C: Projects eligible for the FFH under development by the JNV, for financing long-term costs through the BEV.

CATEGORY D: Home improvement loans being made to beneficiary families by the BEV, scheduled for discounting with the FFH.

CATEGORY E: Projects under development by private builders. Most of these will be financed through private financial institutions. Developers have incurred expenses in land acquisition, preparation of plans and designs, and obtention of municipal approvals, with the intent of submitting the projects for FFH discount and without alternative sources of financing available.

At an exchange rate of S/500 per US \$1, these projects represent a need for over \$31 million in HG resources, which is the amount now authorized. The HG and GOE counterpart funds currently authorized for the FFH are projected to have been fully disbursed by July, 1991 (details in Annex 4).

The progress of the projects for financing by the FFH indicates the need for a borrowing of \$10 million before the end of 1988, to reimburse the FFH for disbursements made and to provide funds for the following ten months' operations.

Ecuador's short-term macroeconomic outlook may make capitalization of interest for the first few years an attractive loan structure for the GOE. As capitalization of interest would consume a portion of the HG authority provided with the 518-HG-007 loan, the assertion that activities now under way will use all authority currently available becomes all the more conservative should the GOE decide to seek its HG loan with such a provision in the interest of partial debt relief during the next few years.

D. Rationale for Supplemental Authorization

The Financial Fund for Housing has succeeded very well in getting private builders and lenders to participate in developing low-cost housing programs -- so well, in fact, that the activities now under way will exhaust all the resources that have been made available to the Fund. It appears likely that all the resources available to the FFH are committed to these projects. The Mission is concerned that the full potential of the FFH to serve the lower range of AID's target group will not be realized unless the BCE finances additional activities which will benefit lower income urban families.

With all the resources now authorized for the FFH expected to be used for the programs listed above, there is an important gap in funding for the urban infrastructure improvements that were proposed in the original Project Paper. The Mission feels that these activities are an important part of the agenda of the National Shelter Delivery System and wants to ensure that there are enough resources in the FFH to carry out these urban infrastructure activities.

While builders and developers were organizing their new low-cost projects, a round of municipal elections earlier this year brought into office in Ecuador a new set of Mayors and their key appointees. These Mayors have contacted AID for support with a broad range of activities from assistance with drug prevention campaigns to programs for the reforestation and protection of sensitive watershed areas.

Many of these Mayors are anxious to move quickly forward with programs to improve the living conditions of low income families in Ecuador's informal urban settlements. The Mission is anxious to respond to this promising new set of municipal leaders who have decided to stop worrying about why they can't help low income families (not enough money, not enough trained technicians, not enough computers, not enough vehicles, not enough seminars or observation trips...) and instead get right to work doing what can be done with the resources they can pull together now.

15

One of the most dynamic figures in this new set of players is Rodrigo Paz, Mayor of Quito since the January elections put the new municipal governments in office. He inherited the inevitable problems that one administration leaves unresolved for its successors. But instead of finding, in all those problems and institutional shortcomings, a raft of reasons for inaction, Paz has gone out aggressively into all the neediest parts of Quito. He has met with community leaders, listened to their concerns, and promised that he will do everything he can to improve the conditions in which they live, work, raise their families, and participate as citizens of a country determined to preserve the tenets of democracy.

The concerns of the new municipal governments coincides with the Mission's interest in rounding out the balance of the agenda of the National Shelter Delivery Program. With all the funds currently available to the FFH pledged to existing housing construction and home improvement programs, the Mission feels that there is now a need to focus on infrastructure improvements, especially in water supply and sewerage improvement in low income neighborhoods.

Urban upgrading activities which benefit low income families and their communities are eligible activities and the Central Bank can discount their financing requirements. Furthermore, AID would be pleased to see a more balanced rounding out of the Financial Fund for Housing Program (FFH), with additional emphasis on the provision of benefits which reach poor urban families at a lower per capita cost than the average achieved to date in the portfolio that has been developed by the Central Bank:

- Infrastructure improvements will reach the lower income families in the marginal neighborhoods that the 007 program has not yet been able to reach. Even families that cannot afford home improvements can afford the costs of basic water improvements (more detail in Section II).
- There is a great need for water and sewerage improvements in informal neighborhoods, as discussed above and in Section III-C, Social Soundness Analysis. A recent study of the informal housing sector conducted by Deloitte, Haskins & Sells found that only 1.7% of the population received their water from the public water supply system and only 3% of the population was served by public sewerage collection systems.

16

Most low-income families in informal settlements receive water from tank trucks at a much higher cost than upper-income residents in formal neighborhoods: a cubic meter of water costs between S/350-450 (Guayaquil) and S/750-800 (Quito) from a tank-truck, whereas the price of water from city systems is about S/20 per cubic meter. Even if families were to increase their water consumption considerably because of in-house water connections, they would still pay less than they do now for water supplied by tank trucks.

With the installation of connections to the public water systems, there will be a corresponding need to evaluate the adequacy of the neighborhoods' current means for disposing of wastewater and to construct wastewater disposal systems where needed to avoid serious health problems.

In Quito alone the Municipal Water Company (EMAP-Q), and the Municipal Sewerage Company (EMA-Q) estimate that \$22 million of water and sewerage projects are needed in marginal neighborhoods. Cuenca has proposed \$2-3 Million of programs for pilot water and sewerage improvements, as well as for upgrading of inner-city tenements. Guayaquil has large needs also, although it has not approached the Mission with any concrete proposals as of now. It is possible that implementing the large World Bank project is occupying all of that municipality's available administrative capacity.

- On the question of water quality, in addition to the risks posed by the trucking phase of delivery, the water is usually held in primitive converted 55-gallon drums and dipped out with buckets as needed. The opportunities for pollution of water are many, even if the water starts out of good quality.
- In addition to meetings and discussions with mayors and their key staff, the mission has met with senior officials in the Central Bank and the Ecuadorian Development Bank. These officials have expressed their support and approval of this set of municipal initiatives, as well as the willingness and ability of their respective institutions to participate in them.
- Community leaders have approached the AID for assistance in securing basic infrastructure services. Recent Mission studies cited earlier have confirmed the urgency which informal communities attach to improving the level of water and sewer service in their neighborhoods; the Mission's

meetings with community leaders reaffirm that urgency as well as the expressed willingness on the part of the communities to pay for the infrastructure they now lack.

- Communities in all major cities have expressed their willingness to participate (financially as well as with their own labor) in the installation of water and sewer services. This presents an attractive opportunity to combine formal-sector resources with those of the informal sector to benefit needy families more broadly. Even where the capacities of some very poor neighborhoods to contribute financially are severely limited, the families can help cover the costs of these activities by working on opening trenches, hauling materials and other activities that do not require a high degree of training.
- Relatively modest infrastructure investments such as those proposed under this amendment (especially where heavy community participation is involved) are usually overlooked in the massive infrastructure programs typically financed by other donors, so AID has an opportunity to intervene constructively and help make a considerable improvement in the quality of life for low income residents in the areas served.

Problem: As established earlier (I-C-3-b) the portfolio of activities which will generate discounts from the Financial Fund for Housing are likely to consume all the financing that AID can make available with the existing authorization. In the face of the commitments which the Central Bank feels it has made to finance the projects now under way, it has indicated that it is unwilling to take on additional agreements for financing which will represent a claim on currently-authorized FFH resources, in the absence of some assurance that additional funding is available (see BCE letter, Annex 5).

The position taken by the Central Bank is reasonable in view of the nature of public-private sector dealings: recognizing the importance of not taking an action which would, in effect be a withdrawal of a previous assurance to provide financing. There is little room to "un-commit" financing for any of the activities currently under way.

Given our interest in supporting the promising urban initiatives proposed by the new municipal authorities and BEDE, as well as in extracting more of the potential that remains in the policy agenda of the FFH program, the Mission is requesting a supplemental authorization of \$10 million.

II. DESCRIPTION OF ACTIVITIES TO BE FINANCED WITH SUPPLEMENTAL AUTHORIZATION

A. Goal and Purpose

The goal and purpose of the National Shelter Delivery System Program remains unchanged from those enunciated at the time the project was authorized:

- * the goal of the program is to improve the quality of life for low income families in urban areas throughout Ecuador by increasing their access to upgraded and new shelter options, financed by both public and private sector institutions.
- * The purpose of the program is to increase the supply of low income housing solutions by assisting the GOE to implement the shelter component of its National Development Program.

The project contemplates financing infrastructure improvements as well as housing. With this supplemental funding, the Program will shift focus onto the infrastructure portion of its agenda, largely through water and sewer system improvements.

B. Relationship to CDDS and Mission Action Plan

Mission support to the GOE through its policy dialogue and HG-funded programs has helped to improve the nature of GOE efforts in the shelter sector. It has encouraged and facilitated a progression away from costly force account construction of completed housing units, to progressive housing, private sector execution, and home improvement lending.

The new interest on the part of the GOE and municipal authorities promises to achieve one more important goal, by closing the finance gap separating municipalities from the groups most in need of improved municipal services.

This Supplement, then, permits the National Shelter Delivery System Program to meet its objectives more fully. This is consistent with the Mission's determination that AID's most effective role in helping the GOE to improve the quality of life for low-income urban families is by supporting a range of shelter finance activities, affordable to a wide spectrum of low-income urban families.

The additional funding sought for the National Shelter Delivery System program is consistent with the Mission's most recent Action Plan. In the Action Plan, the Mission emphasizes continued pursuit of lower costs, of a wide range of solutions to meet the needs of different families, and emphasizes the importance of making better use of families' capacities to contribute, through self and mutual aid, to the solution of their shelter problems. The Action Plan is also clear on the interest of the Mission in expanding infrastructure networks into low income neighborhoods, in improving existing urban service networks, and in working with municipalities to achieve the objectives identified above.

In its Action Plan, the Mission foresaw the need to seek this supplemental authorization, pointing out in its Narrative that it was designing a \$10-20 Million add-on to the HG-007 loan for this fiscal year, to place emphasis on urban upgrading activities that reach larger numbers of low-income families. Also, "In future years, the Mission expects to move away from financing new houses in favor of relatively more efficient loans for home improvements and upgrading activities" (Program Performance Indicators).

C. Project Inputs and Expected Benefits

Additional resources provided by the supplemental authorization will finance the extension of basic services to low-income neighborhoods in urban areas. While the range of eligible urban services is broad and includes not only water/sewerage improvements but also improved access roads, public lighting, storm water management, and others, the focus of this activity will be primarily on the extension of potable water to neighborhoods not now served, and the provision of sewer service where failure to include this component would be an environmentally unsound decision.

The emphasis on potable water reflects a sense of urgency on the part of municipalities to address a very basic and pressing need facing growing numbers of low-income urban families. It recognizes, also, that important benefits can be achieved with a relatively low per-capita level of investment, an important consideration for serving very low-income groups.

Without foreclosing the possibility of financing other appropriate upgrading initiatives, the main emphasis is on potable water provision and sanitary sewerage connections.

Urban Upgrading Opportunities:

As explained earlier, a variety of different urban upgrading programs have been proposed by the Mayors of several cities. Water and sewerage provision clearly enjoy the highest priority. They are important not only to politicians and public health experts, but also to the communities that do not enjoy them today. This has been confirmed repeatedly in surveys and studies, including several conducted recently by the Mission:

- * "Shelter Production Study: Formal/Informal Sector"-- Consulcentro, 1988;
- * "Preliminary Urban Development Assessment"-- R. Nathan Assoc., 1988;
- * "Housing Finance Strategy for Ecuador"-- Deloitte, Haskins and Sells, 1988;
- * "Evaluation of the Solanda Project"-- PADCO, 1988;
- * "Housing Quality Model"-- The Urban Institute, 1988.

What Will the Project Do?

\$10 million in additional resources will permit the Central Bank to support municipal water and sewer programs in low income urban areas. These activities have not only the merits of improving the quality of life for the beneficiary families; they will, in many cases, save money for those same families. Although the costs and level of services and timetables vary from city to city, this project paper supplement presents the most complete information available at this time to the Mission, which is largely limited to information on Quito projects.

How the Program Will Work:

In principle the program works in the same way that it does for more traditional new construction type projects:

- Serving as the "developer", the water and/or sewer authority will design and execute the "projects" and deliver the finished "products" to beneficiary families in the communities served. These families will pay for these products with loans from the utility companies.
- As the loans to beneficiary families are generated, the utilities will present them to the Ecuadorian Development Bank (BEDE) and be reimbursed for 100% of the loan amounts.

21

- BEDE, in turn, will present "packages" of those loans to the BCE, which will also discount 100% of the loan amounts through the FFH.
- Beneficiaries will repay their loans to the utilities, which will repay their loans to the BEDE, which will in turn repay the BCE for the discounts.

Who Will Pay?

Most current "formal sector" users of municipal water and sewer systems paid their pro-rata shares of the cost of the systems at the time they bought their houses, had their houses built, bought their fully-serviced lots in subdivisions, put up their factories, developed their office buildings, etc. etc.

In this sense "new users", i.e. the beneficiaries of the programs which the municipalities will undertake, are not being asked to pay for anything that was not also charged to the "old users". But it is important to note that a lot of conditions have changed, and many of the deep subsidies that were provided to municipal utility companies (and passed on to the "old users") are now in very short supply. In sum, the water and sewer companies now need to recover the full costs of their operations, both the costs of new service provision as well as those required for maintenance, operation, building up reserves, and other running expenses.

For such programs as the ones which these municipalities are now undertaking it seems unfair that when the new clients are the poorest clients, they should have to pay all the costs of their service provision when earlier (and usually considerably better-off) clients were helped out with generous subsidies.

The inequity of the situation glares, and it is no less obvious to the poor, new clients than it is to the municipalities that want to provide the services but realize that they must recover their costs as they do so. Both for this reason and as part of their general predisposition to assure a minimum level of essential services to all families, without regard to level of income, the municipalities are looking for ways to distribute more equitably the costs of service provision.

The Municipality of Quito is working on this problem from several angles. Three of these have to do with to the costs of furnishing water service:

First, graduated service costs: The rate at which users are charged for their water will increase in proportion to the usage. Bills will therefore increase non-linearly for larger users, while users of smaller quantities will enjoy a preferential tariff.

Second, neighborhood differentiation: Some neighborhoods in the city are predominantly low-income areas while others are almost exclusively upper-income residential areas. Higher basic rates will be assessed in the latter areas.

Third, categorical differentiation: Water users will be divided into categories, and different rates will be charged according to the kind of client. This will, for example, enable the utility to serve hospitals at lower rates than commercial laundries.

Another aspect concerns the cost of installing the neighborhood service networks. The Municipality plans to allocate a part of the cost of installing neighborhood networks in low-income settlements to the overall cost of operation of the utility system. This will permit "old users" of the system to share with lower-income "new users" the benefits of the generous financial subsidies provided in earlier years.

The last element is the only one which is applicable in the case of sewerage installations, as there is no reasonable way to assess families on the basis of usage.

Mechanisms for cost-sharing are of interest to municipal authorities for reasons other than a sense of social equity alone: having more than one source to look to for repayment when costing out proposals provides greater flexibility. The question of cost sharing is an important part of the programs now being prepared by the municipalities, and we will look at it again later in assessing the feasibility of the proposed activities.

The Nature of the Municipal Proposals:

The Municipality of Quito has presented the most fully-developed set of proposals for water and sewerage provision to low income communities. Representatives of other cities as well as of provincial jurisdictions have expressed

interest in support from the Mission for similar programs and the Mission expects that the additional resources provided by this supplemental authorization would benefit those as well as Quito.

Quito information is used to present the case for the program to be financed with the supplemental authority sought by the Mission for the Financial Fund for Housing; while programs will vary in detail from city to city, the fundamental thrust is unchanged.

The Quito Proposals:

Although the Municipality of Quito estimates that the sum of the needs for improved services in informal settlements is well in excess of \$20 million, that need cannot all be met in the near future for many reasons.

The municipality is organizing a water/sewer provision program which, over time, will extend services to as many communities as possible. Many neighborhoods, although they have been in existence for years, will have to wait for additional water from the Papayacta project (see I-B-3 above), while others will be denied service because they are in areas which are not suitable for long-term settlement (around the Municipal Gas Works, on the fringes of the Pichincha Forest Preserve...).

From the large universe of interested communities, the municipality has identified thirty-six spontaneous settlements, which at this time have a combined population of about 310,000 persons (projected to reach 900,000 within twelve years). All the communities that have been selected are ones where water service can be provided now, without waiting for the completion of projected new systems to increase Quito's water supply. The municipality plans to bring other settlements into its upgrading program, but:

(1) recognizes that there is a little point in putting water lines into areas where there will be no water to deliver for some time (and less hope of convincing people to pay for such installations), and

(2) feels that there is much that can and should be done to improve the quality of service provided to low-income neighborhoods with the resources available today.

TABLE V

MUNICIPALITY OF QUITO
BASIC INFRASTRUCTURE UPGRADING PROGRAM
FIRST PHASE

	LOTS	PERSONS

- A- PROJECTS FOR WATER SUPPLY:		
- LOMAS DE PUENGASI	14,700	118,000
- SUR ORIENTAL	5,500	44,000
- LA FORESTAL	1,200	9,300

WATER TOTAL	21,400	171,300

B- PROJECTS FOR SEWER:		
- FIRST PACKAGE	2,400	19,200
- SECOND PACKAGE	3,300	26,400
- THIRTH PACKAGE	5,700	45,000
- FOURTH PACKAGE	5,700	45,000

SEWER TOTAL	17,100	136,600

COMBINED TOTALS	38,500	308,100

The following table is a summary schedule of EMAP's project for providing water to the communities listed in Table V, above. The detailed work-plans are included in Annex 6.

TABLE VI

EMAP

ACTIVITIES SCHEDULE FOR IMPLEMENTING WATER SYSTEM PROJECTS
FOR PERIPHERAL SETTLEMENTS-QUITO, ECUADOR.

ACTIVITIES	TOTAL	1988				1989				1990			
		II	III	IV	I	II	III	IV	I	II	III	IV	
SUMMARY: Costs													
US DOLLARS (THOUSANDS)													
PACKAGE 1.-LONAS FUENSASI	13242.4	0.0	0.0	0.0	0.0	771.5	866.3	986.9	617.7	0.0	0.0	0.0	
PACKAGE 2.-SUR ORIENTAL	1210.2	0.0	0.0	0.0	0.0	142.2	416.2	253.8	211.6	182.6	3.8	0.0	
PACKAGE 3.-LA FORESTAL	257.1	0.0	0.0	0.0	0.0	12.4	93.7	98.3	51.1	1.7	0.0	0.0	
TOTALS 1+2+3	14709.7	0.0	0.0	0.0	0.0	926.1	1376.2	1339.0	880.4	184.3	3.8	0.0	
CUMULATIVE COSTS	14709.7	0.0	0.0	0.0	0.0	926.1	2302.3	3641.2	4521.6	4705.9	0.0	0.0	
DISCOUNT FROM FFH	14238.7	0.0	0.0	0.0	0.0	0.0	986.6	1116.6	1116.6	851.3	167.6	0.0	
LOTS SERVED	21408	0	0	0	0	4209	6255	6086	4002	838	17	0	
POP. SERVED (thousands)	171	0	0	0	0	34	50	49	32	7	0	0	

AVERAGE COST/LOT (US) = 220.0
 PERSONS/LOT = 8.0
 AVERAGE FAMILIES/LOT = 1.3

24

The sewerage authority (EMA-Q) has developed a program which is similar to the one described above for water provision. The principal differences between the two programs are these:

Average cost per household served is a bit lower: \$174 versus \$220.

- Shared cost recovery is also anticipated, but it will be through taxes rather than surcharges on general system revenues.

EMA's program plans to provide service to some 17,800 lots, at a cost of roughly \$3.1 (\$2.5 in HG discounts) over the same three-year period.

TABLE VII

SCHEDULE FOR IMPLEMENTING SEWER SYSTEM PROJECTS
FOR PERIPHERAL SETTLEMENTS - QUITO, ECUADOR.

ACTIVITIES	TOTAL	1988				1989				1990			
		II	III	IV	I	II	III	IV	I	II	III	IV	
SUMMARY: Costs													
US DOLLARS (THOUSANDS)													
1.- PACKAGE 1.-	432.6	0.0	0.0	0.0	0.0	216.3	216.3	0.0	0.0	0.0	0.0	0.0	0.0
2.- PACKAGE 2.-	596.6	0.0	0.0	0.0	0.0	179.6	344.6	72.4	0.0	0.0	0.0	0.0	0.0
3.- PACKAGES 3 AND 4.-	2060.0	0.0	0.0	0.0	0.0	0.0	478.0	858.0	618.0	106.0	0.0	0.0	0.0
TOTALS 1+2+3	3089.2	0.0	0.0	0.0	0.0	395.9	1038.9	930.4	618.0	106.0	0.0	0.0	0.0
CUMULATIVE COSTS	3089.2	0.0	0.0	0.0	0.0	395.9	1434.8	2365.2	2983.2	3089.2	0.0	0.0	0.0
DISCOUNT FROM FFH	2471.3	0.0	0.0	0.0	0.0	0.0	274.4	906.1	631.6	494.4	164.8	0.0	0.0
LOTS SERVED	17754	0	0	0	0	2275	5971	5347	3552	609	0	0	0
POP. SERVED (thousands)	142	0	0	0	0	18	48	43	28	5	0	0	0

AVERAGE COST/LOT (US) = 174.0
 PERSONS PER LOT = 8.0
 AVERAGE FAMILIES/LOT = 1.3

27

The Water Program:

The cost of providing the water service to each lot is, on the average, 110,000 sucres, which covers the proportional cost of the neighborhood trunk lines, the laterals to the lots, and the installation of the water meter. (Internal distribution is not covered; each family will arrange to have the service within the lot plumbed according to its personal needs).

EMAP-Q plans to charge 50% of the cost of the installation to each beneficiary family, collecting the remaining 50% of the loan service from a general tariff revision which is now being examined by the Municipal Council. EMAP expects that the revision will be approved without any objection to this proposal, which will call for an increase of less than S/3.5 per cubic meter of water on all clients' bills.

The details of project level feasibility are presented in Annex 7 but, based on the program structure presented above, beneficiary families can increase by a factor of nine the amount of water they consume, pay off their 50% of the cost of the loan to install the system over ten years, and still save S/1780 per month. Should the families have to pay the full cost of the installation over the same period, their savings would decrease, but still be about S/1030 per month.

The municipality expects to be able to structure the programs with the 50% charge to the beneficiaries of the installation cost instead of having to bill them for the full amount, but even in the less favorable case the net savings on expenses for water are more than sufficient to finance the costs of installing the sewerage system as well.

How Does It Work?

The water program involves the participation of the communities as well as the actions of EMAP-Q. Mutual help sessions, which have long been part of highland Ecuadorian custom, will permit families to help with many of the unskilled tasks required in the program: preparing ditches, hauling materials, clearing areas for work that is about to be done.

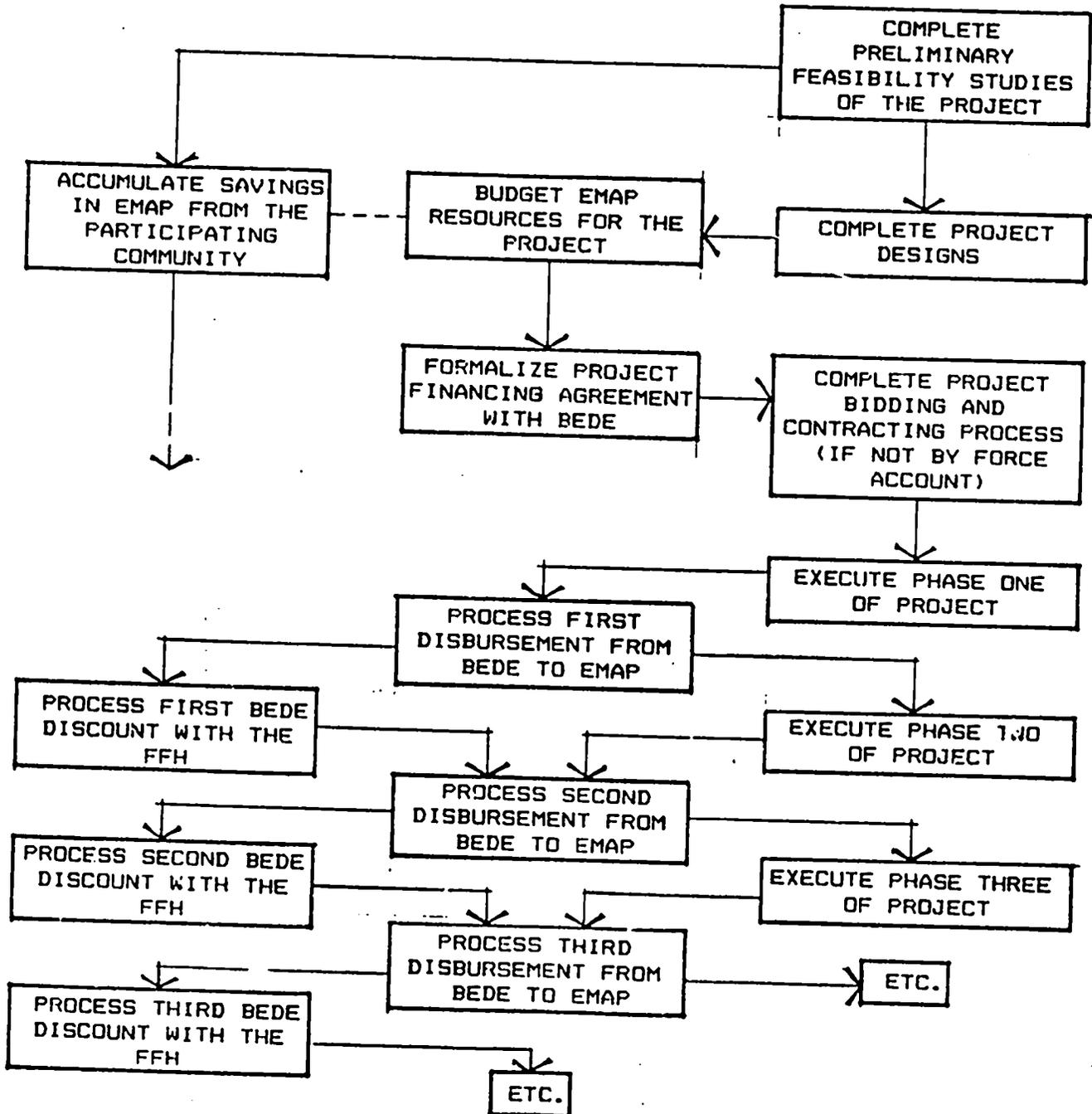
A program of prior savings is also part of the program. Families in the community are expected to save ten percent of the cost of the installation before the program begins. These funds will provide the working cash needs of EMAP's program, which will serve 171,000 persons (21,400 lots) over a two-and-a-half year period, at a cost estimated at about \$4.7 million (HG discounts of \$4.2 million).

A simplified illustration of the way this will work follows:

FIGURE 1

REPRESENTATION OF IMPLEMENTATION PLAN
MUNICIPALITY OF QUITO WATER AUTHORITY
SPONTANEOUS SETTLEMENT UPGRADING PROGRAM

emap2.wk?



29

Water/Sewerage Coordination:

Now that the Municipality of Quito has decided to deal in earnest with the basic infrastructure needs of the city's low-income informal settlements, the municipal infrastructure authorities are faced with a coordination challenge that they do not have to worry about in their dealings with formal sector activities.

Since many of these communities have developed "off the record" and have not been well documented or included in any larger planning process, there is a significant amount of informally-developed infrastructure to cope with. To say that it has been developed informally is not to suggest that it is inferior in quality of design or execution, although it most probably resolves problems in ways other than those that the municipal authorities would probably have employed beginning with tabula rasa.

One interesting challenge both to EMAP-Q and to EMA-Q will be to try to incorporate the investments which have already been made where it is reasonably possible to do so. Another will be to coordinate their own efforts. They are now cross-indexing their work schedules in an effort to maximize efficiency, since they will not in all cases work in the same areas at the same time.

A fair number of sewerage systems have been installed even where piped water has not yet been provided, to manage the sewer produced from tank-truck supplied water. The inverse condition also exists, although there are fewer neighborhoods with piped water and no sewerage systems.

III. PROGRAM FEASIBILITY ANALYSIS AND TECHNICAL ASSISTANCE REQUIREMENTS

A. Technical Analysis

The original Project Paper analyses both the availability of physical resources for the project, the capacity of the construction industry in Ecuador, the typology of various shelter solutions and construction costs. This original analysis remains valid. It should be noted that the "shelter" solutions that will be the focus of activities supported by this amendment will consist largely of water distribution systems within neighborhoods, household water connections, domestic sewer service connections, and neighborhood sanitary sewer trunk lines. Adequate capacity exists in Ecuador to design and construct such projects.

Municipalities, and their respective water and sewerage companies have adequate experience in solving the technical problems associated with providing basic infrastructure services in their cities. As the Ecuadorian Development Bank (BEDE) will serve as the financial intermediary in this program, it will review project designs to ensure that all the sub-projects are technically sound (see Institutional Analysis, below).

Although every effort will be made to reduce costs of providing this service through innovations in terms of materials, designs, levels of service, and use of community participation for the unskilled labor component of the programs, the Mission does not foresee any significant technical issues with this activity.

B. Institutional Analysis

While the institutional analysis contained in the original PP remains valid, additional analysis of the major institutions involved in this \$10 million add-on (the Ecuadorian Development Bank (BEDE) and the Municipalities of Ecuador) is included herewith.

1. The Ecuadorian Development Bank (BEDE)

The BEDE was established in 1976 to organize and facilitate the transfer of central government resources to Ecuador's regional and municipal governments. Its loans generally finance infrastructure and services. For its resources, BEDE draws for the most part on the central government at no cost. Its interest rates have traditionally been preferential, ranging from 9 to 18 percent depending upon the type of project and the borrowing capacity of the municipality or the Provincial Council.

As of mid-1987 BEDE's portfolio consisted of 393 development loans totaling over \$600 million, most for large civil works in the range of US\$5-10 million. Only about 10% of BEDE's portfolio is comprised of municipal loans.

In 1987 BEDE disbursed the highest amount of loans since it began operations, S/21.8 billion (approximately US\$87.2 million). The same year it authorized 19 new loans for S/9.8 billion (approximately US\$39 million), of which 5.2% were provided for water and sewerage projects. (Avg. exchange rate for 1987: S/250 to US\$1)

The major source of BEDE's lending funds has been its mandated share of oil revenues. From a peak contribution of S/7.2 billion in 1984, oil revenue contributions have fallen steadily to S/2.9 billion in 1987. Since this later figure is not adjusted for inflation, it is probable that BEDE is only receiving about one-tenth as much revenue from this source in 1987 as compared to 1984. Nevertheless, BEDE has been able to maintain, and even increase (in current sucres), its lending activities. This is due to the fact that BEDE makes interest bearing loans (albeit at below market interest rates) that must be repaid. This provides BEDE with a constant rollover of funds. In addition to oil revenue contributions and loan recuperations, BEDE also recently borrowed S/5 billion (approximately US\$10 million) from the Central Bank. (Current exchange rate: Approx. S/500 to US\$1)

Given that most of BEDE's financial resources are at no cost, and in turn that those resources are loaned at interest rates ranging from 9 to 18 percent, BEDE's net positive flows have been substantial. In 1987, BEDE's gross income was S/8.5 billion, while expenses were S/1.2 billion. After putting aside certain amounts for revenues and other obligatory contributions, BEDE's net income for that year was S/5.6 billion.

The organizational structure of BEDE consists of a General Manager who is the highest executive and administrative official within the bank and the following operating divisions:

- Technical Division, responsible for reviewing and analyzing proposals from public institutions and presenting proposals to the Bank's Credit Committee for review and transmittal to the Bank's Board of Directors.
- Credit Division, responsible for monitoring the implementation of the Bank's credit policies.
- Planning Division, responsible for producing annual operating plans and generating reports and statistical information on the Bank's performance.
- Financial Management Division, responsible for the financial administration of the organization.
- Administrative Division, responsible for the management of human and physical resources.
- Information Division, responsible for managing and optimizing the Bank's information systems.

Other operating units consist of an internal auditing unit, a legal department, general secretariat, which monitors the Bank's operations and processes and maintains all official documents, a credit committee, a procurement committee and a committee for coordination and monitoring of projects.

Oversight of the Bank operations is exercised by a General Assembly of Stockholders, a Board of Directors (which has, as one of its responsibilities, the approval of loans), and an Executive Committee (which sets standards and procedures for Bank operations).

The BEDE's headquarters are in Quito. However, they maintain another office in Guayaquil for the monitoring of projects in Guayas, Manabí, Los Ríos, el Oro and the Galápagos.

BEDE served as overall co-ordinating agency for the Mission's Emergency Rehabilitation Project which ended in September, 1987. The Mission was pleased with BEDE's performance in the programming and administration of funds. Based on BEDE's performance with this project, the Mission believes that BEDE has the experience as well as the required organizational and management capacity to undertake this proposed \$10 million program.

While the Mission has had the opportunity to assess BEDE's administrative capacity, it has had few chances to observe and evaluate BEDE's technical capability to analyze loan proposals. As stated previously, it is BEDE's Technical Division that reviews all proposals for technical and environmental soundness as well as for financial feasibility. Prior to executing an amended Implementation Agreement for infrastructure programs, the Mission will evaluate BEDE's capabilities and procedures for reviewing project technical designs, evaluating environmental impacts, and assessing municipal administrative capacity to undertake projects. If BEDE's procedures are found insufficient, technical assistance will be provided to make improvements.

2. Municipalities

The provision of water and sewer services in Ecuador is a function of municipal governments. In the larger cities, semi-autonomous water and sewerage authorities or companies have been set up to develop, operate and maintain these basic services, while in most of the smaller cities, a department(s) in the local municipal government provides this service.

The organization of Quito's water company (EMAP-Q) is provided here as an example. EMAP-Q consists of: a Director and other general management staff; a Financial Division which administers the company's financial resources and collects water tariffs; a Technical Division, which performs feasibility studies and designs, supervises construction of water system improvements, and operates and maintains the city's water; and an Administrative Division which manages personnel matters, keeps the company's official documents, and procures commodities. Most construction is performed by private contractors.

The growth in urban population, coupled with a severe strain on financial resources, has prevented the municipalities and their authorities from providing every family with these basic services. Large numbers of families, especially low-income ones in the fast-growing informal settlements, all too often do not have even the minimum basic level of water and sewer services needed.

Municipal governments are working hard to improve their ability to deliver basic water and sewerage as well as other municipal services which support urban areas. Historically water usage tariffs have been low; programs are under way to adjust tariffs upward to increase revenues and cover additional costs. At this time about 45% of all water consumed in Quito is paid for by the customer; this situation is also being corrected. Faced with declining central government contributions, municipalities have recognized the importance of moving the utilities toward greater financial self-sufficiency.

This set of problems is endemic but does not paralyze the utilities; the solution of those problems will only be possible over the long term, while in the short run there are needs that have to be met and programs that need to be done.

A recent World Bank Assessment points to other problems, including poor administration, less than adequate operation and maintenance practices and personnel problems due to low salaries, lack of incentives, and a high turnover in management. Municipalities have a hard time keeping up with the high pace of urban growth in Ecuador. Their resources are limited, staff skill levels are generally low and turnover high, and administrative performance is less than desirable.

The fact remains, however, that is the municipal authorities that provide water and sewer services. Despite their problems and limitations, it is up to them to serve low income groups, and the financing from this program will help address a major problem: insufficient resources.

Technical capacity is not lacking; the engineering capability is present. Through its technical assistance to the municipality, the Mission plans to help address the important concerns of tariff adjustment, metering, reductions of system losses, and improved financial management for water and sewer authorities.

As discussed above in Section III B 1, BEDE's technical division will assess each individual municipality's institutional and technical capabilities to carry out projects, at the time proposals are presented. Factors that will be considered include:

- 1) staffing to undertake additional projects
- 2) past experience in administering similar projects
- 3) financial status, including ability to pay for operating costs through tariff income
- 4) past performance in servicing loans
- 5) norms and standards for design and construction

Once BEDE determines that the municipality is capable of undertaking the project it will review technical designs in detail, assess the project's environmental impacts and evaluate the project's proposal for cost recovery.

If it is determined that a municipality requires technical assistance before undertaking a project, BEDE will notify AID and the BCE. After reviewing a municipality's technical assistance needs, AID and the BCE will make a determination regarding the use of 518-0076 funds to finance the assistance.

C. Social Soundness Analysis

This section updates the Social Soundness Analysis contained in the original PP by providing information on the status and need for infrastructure and services in low income neighborhoods.

Deloitte, Haskins & Sells recently performed a study of financing for housing, infrastructure and services in 24 marginal neighborhoods in four major cities in Ecuador - Quito, Guayaquil, Cuenca and Santo Domingo de los Colorados. This study found that only 1.7% of the population in marginal neighborhoods received water in their houses through the public

water distribution system, while 92.9% received water from tank trucks, of which 89.7% were private tank trucks. Another 1.8% of the population received water from nearby springs.

With regard to use of sewerage systems, the study found that 75% of the population used latrines. Another 29% of the population possessed no means to dispose of sanitary wastes. Only 3% of the population was connected to the municipal sewerage system.

With regard to electricity, 96.3% of the population possessed electrical service. However 42.3% of these connections to the electrical distribution system was illegal. Only 28% of the population enjoys public lighting.

The water supply situation appears to be one of the worst problems in these marginal neighborhoods, due to the high cost of obtaining water from tank trucks. For example, in Guayaquil the average cost of water per m³ distributed by tank truck is S/318. The cost of water distributed by the municipal system is S/20 per m³. Most families in these neighborhoods that buy water from tank trucks spend between S/3,000 and S/4,800 per month, which is equivalent to 10 to 15% of their monthly income. (Note: Updated figures for cost of water in Quito following recent increases in gasoline and diesel prices are S/150 for a 55-gallon drum, or S/750 per cubic meter- Sept. 9, 1988.)

The water supply and sewer improvements proposed under this supplemental authorization will significantly reduce the amount that families in marginal neighborhoods pay for water. Interviews with families in these neighborhoods confirm willingness to pay for these services, and to contribute their own time and personal efforts to help secure them.

In addition, household connections to municipal water supplies and sewerage systems should have positive health impacts through reducing chances for contamination of water and improving sanitary conditions in neighborhoods.

D. Financial Analysis

The financial mechanisms to be used in this supplemental project are the same as in the original HG-007 project. BEDE (Ecuadorian Development Bank) will act as the Intermediate Financial Institution (IFI) between municipal water and sewer companies and the Central Bank's Financial Fund for Housing (FFH). All of the loans that BEDE makes to the municipal water and sewer companies will be eligible for 100 percent

36

discounting with FFH because the household water/sewer solutions to which the loans apply cost less than 20 multiples of the monthly minimum wage.

EMAP-Q (Empresa Municipal de Agua Potable - Quito) and EMA-Q (Empresa Municipal de Alcantarillado - Quito) have presented analyses to the Mission substantiating the financial feasibility of this activity from the perspective of consumer ability and willingness to pay and of municipal willingness to provide the services to the neighborhood.

Water Project Financing

EMAP-Q estimates that the full cost of extending water service to currently unserved households is S/.110,000 per lot (or \$220 per lot). EMAP-Q has in place a community savings fund whereby unserved households make payments towards future extension of water service to their lots. For this project, that savings fund would be used as a 10 percent downpayment on the per-lot cost of water extension. EMAP-Q asserts that sufficient funds exist in this saving mechanism to provide downpayments for the 20,800 households which will benefit from water extension under this project. The remaining 90 percent of the cost of service extension, or S/.99,000 per lot, will be financed with project funds.

Two cost recovery scenarios for the financed portion of service extension are presented here. The first assumes shared cost recovery; i.e., that cost recovery is split between the newly-served households and a system-wide water tariff increase. The second scenario assumes non-shared cost recovery; i.e., full cost recovery from only the newly-served households.

Shared Cost Recovery. If households are to finance 50 percent of the EMAP-financed service extension cost, that represents S/.49,500. EMAP-Q proposes financing terms of 10 years at 21 percent interest with a 9 percent annual escalation in payments (the Mission is assuming that EMAPs and EMAs will be borrowing funds from BEDE with terms of 10 years at 20 percent interest with a 9 percent annual escalation in payments). This results in a monthly payment to EMAP of S/.751 per household (or \$1.50 per month per household). Assuming 20,800 households are to benefit from service extensions, the total financing to be recovered through a tariff increase amounts to S/.1,029,600,000 (\$2,059,200). EMAP-Q will therefore be making a monthly payment to BEDE of S/.15,009,208 (\$30,018) to finance this portion of the system extension. EMAP-Q's monthly volume of production, including the additional consumption by project beneficiaries, is 4,404,480 cubic

meters. Therefore the necessary tariff increase to recover one-half the financing for system extension is S/.15,009,208 divided by 4,404,480 cubic meters, or S/.3.41 per cubic meter. With an existing average tariff rate in Quito of S/.25 per cubic meters (\$0.05/cubic meter), this amounts to a 13.6 percent increase in the average water tariff.

Full Cost Recovery by Project Beneficiaries. If we assume no tariff increase to contribute to cost recovery, then 100 percent of the financing costs will be borne by the unserved households. That is, S/.99,000 (\$198) per household over 10 years at 21 percent interest with a 9 percent annual escalation in payments, which amounts to a monthly payment of S/.1,502 (\$3.00) per household.

Sewer Project Financing

As in the case of water, EMA-Q, the Quito sewer company, has presented analyses to the Mission that describe how sewer extension financing would operate. EMA-Q estimates that the full cost of sewer extension to currently unserved lots would amount to S/.87,000 (\$174) per lot. As with the water company, accumulated community savings exist to be used as downpayments on sewer service extension, but in this case the savings would be used as a 20 percent downpayment, leaving S/.69,000 per household to be financed through BEDE. Again, two cost recovery scenarios are presented.

Shared Cost Recovery. Under this scenario, 90 percent of the financed portion of sewer extension (S/.62,640 or \$125) would be financed by newly-served households, and the remaining 10 percent (S/.6,960 or \$14 per household) would be financed by a system-wide increase in property tax rates, which is how sewer service is paid for in Quito. The monthly payments of the targeted households, at the same financing terms as for water, amounts to S/.951 (\$1.90) per household. EMA-Q calculates that property tax rates would need to be increased 1.5 sucres per S/.1,000 valuation to contribute to cost recovery.

Full Cost Recovery by Project Beneficiaries. If current users of the sewer system do not contribute to cost recovery of system extension to new users, then the project beneficiaries will pay all of the financed cost of service extension, or S/.69,600 (\$139) per household. With financing terms of 10 years, 21 percent interest, and a 9 percent annual escalation, this would amount to S/.1,056 (\$2.11) per month per household.

Affordability Analysis

The service extension plan and cost recovery scenarios can be combined to assess households' ability to pay for the program. The different combinations are presented in Figure 1. In each case the cost of the program to the beneficiaries is compared to their existing ability and willingness-to-pay for water from other sources. We use as a benchmark of willingness-to-pay the survey results contained in the 1988 Deloitte, Haskins, and Sells report on conditions in informal sector housing settlements in Quito and Guayaquil. These surveys indicate that households are now spending S/.150 per 55 gallon drum of water, which is S/.750 per cubic meter; in terms of monthly water consumption this is S/.3,375 (\$6.75) per month to purchase 4.5 cubic meters of water (about 24 55-gallon drums) from water vendors. Households consume considerably more water from piped water system; we estimate that the average household will consume 40 cubic meters per month from municipal water system, at a monthly cost of S/.840 (\$1.68).

From a financial-cost perspective, households are better-off under all but one of the cost recovery scenarios, scenario vi, and under the latter scenario households are spending less than one percent more than their current purchases from water vendors. That is, under any scenario of cost recovery, households are unambiguously better-off, with the financial savings ranging from 2.4 percent to 53 percent of their current water expenditures. The household's savings in water expenditures override their financing charges for system extension. Even with full cost recovery from project beneficiaries, households spend less than one percent more than their current expenditures. These benefits are only financial benefits; they do not account for the economic and non-economic (health-practice and other) benefits attached to greater water consumption from the municipal source.

Figure 1: Household Ability-to-Pay Scenarios

Scenario i) Water-only with Shared Cost Recovery:

S/. 751 per month financing
S/. 840 per month water consumption charges
S/.1,591 per month total expenditures

= HH saves S/.1,784 per month over current expenditures

Scenario ii) Water-only with Nonshared Cost Recovery:

S/.1,502 per month financing
S/. 840 per month water consumption charges
S/.2,342 per month total expenditures

= HH saves S/.1,033 per month over current expenditures

Scenario iii) Water and Sewer with Shared Cost Recovery

S/. 751 per month water financing
S/. 951 per month sewer financing
S/. 840 per month water consumption charges
S/.2,542 per month total expenditures

= HH saves S/.833 per month over current expenditures

Scenario iv) Water with Shared Cost Recovery, Sewer with Nonshared Cost Recovery:

S/. 751 per month water financing
S/.1,056 per month sewer financing
S/. 840 per month water consumption charges
S/.2,647 per month total expenditures

= HH saves S/.728 over current expenditures

Scenario v) Water with Nonshared Cost Recovery, Sewer with Shared Cost Recovery:

S/.1,502 per month water financing
S/. 951 per month sewer financing
S/. 840 per month water consumption charges
S/.3,293 per month total expenditures

= HH saves S/.82 per month over current expenditures

Scenario vi) Both Water and Sewer with Nonshared Cost Recovery:

S/.1,502 per month water financing
S/.1,056 per month sewer financing
S/. 840 per month water consumption charges
S/.3,398 per month total expenditures

= HH spends S/.23 more than current expenditures

40

Cash Flow Projections for the Intermediate
Financial Institutions

As discussed above, BEDE will serve as the IFI for the activities proposed in this project supplement. The cash flow projections of BEDE, for this activity only, are presented in Table 1, and are straightforward. As a development bank, BEDE scrutinizes projects submitted to it for financial, technical and environmental soundness. Beyond these evaluations and administrative supervision of loans covered by its 2 percent loan supervision fee, BEDE is acting as a "pass-through" in the process. The table projects use of HG-generated resources only; counterpart funding would of course add to the number of households that could be served.

The HG resources of US\$ 10 million would be converted at the exchange rate current at the time of signing of the Implementation Agreement or subsequent loan disbursements; for purposes of Table 1, we use the current exchange rate of 500 sucres to the dollar. This yields 5 billion sucres in program funds for lending. We assume that BEDE disburses program resources to the municipal water and sewer companies in three equal amounts in years one through three of the program and that net cash surpluses are not used as program reflows.

When BEDE submits loan packages to the FFH for discounting, its loan terms with FFH are 10 years at 18 percent interest with a 9 percent annual payment escalation. When BEDE lends to the municipal water and sewer companies, it adds on its legislatively-mandated two percent bank commission to the interest rate, bringing it to 20 percent, and two-point supervision fee which is either taken out of or added to the loan amount at loan origination. Therefore, BEDE lends at 20 percent, for 10 years, with a 9 percent annual escalation in payments.

Table 1

BEDE Project Cash Flow Projections
(Millions of Sucres)

Year	1	2	3	4	5
Beginning Cash Balance	---	24	72	144	216
Total Funding	1,667	1,667	1,667	----	----
2% BEDE Supervision Fee	33	33	33	----	----
Water/Sewer Loan Repayment	292	584	876	876	876
BEDE Debt Service	268	536	804	804	804
Net Cash Surplus (Deficit)	24	72	144	216	288

42

E. Environmental Analysis

The Initial Environmental Examination (IEE) for the HG-007 program determined that the program would not have significant impacts on the environment and gave the project a Negative Determination. Further review of the way the program is now being implemented and is planned to be implemented in the future has led the Mission to determine that the program falls within a category of activities (Categorical Exclusions) for which an Initial Environmental Examination, Environmental Assessment or Environmental Impact Statement is not required. Section 216.2 (c) (ii) of AID's Environmental Regulations states that such analyses are not required when "AID does not have knowledge of or control over, and the objective of AID in furnishing assistance does not require, either prior to approval of financing or prior to implementation of specific activities, knowledge of or control over, the details of the specific activities that have an effect on the physical and natural environment for which financing is provided by AID". The HG-007 program falls within this category because under this program AID does not approve separate subprojects prior to financing and has no knowledge of control over the details of the specific subprojects it is financing.

However, despite the Mission's request for a Categorical Exclusion in Annex 8, the Mission is cognizant that neighborhood water and sewerage projects can cause significant environmental impacts in their localized environments. Of particular concern are:

- The need to assure that all projects involving expansions of water supply distribution systems take into account the adequacy of sewage disposal systems in the project area and ensure that necessary improvements to the sewage disposal system are completed concurrently with the new water distribution system.
- The scarcity of water in both Quito and Guayaquil. Both cities are undertaking large projects to expand their source of supply. Activities undertaken before these project come on-line must be looked at to ensure that they do not reduce overall system pressure to a point where groundwater infiltration might become a problem. One way to avoid this problem is to schedule construction in neighborhoods that already have separate sources of water supply such as nearby springs, earlier in the program as proposed in Quito. (In this case we would need to confirm that the water is potable)
- The capacity of municipal sewerage collection system to handle the additional volume of wastes.

Because of the Mission's concern for potential environmental

13

impacts of these infrastructure projects, the Mission does plan, as discussed in Section III B 2, to have BEDE evaluate the environmental impacts of individual projects and make recommendations for mitigation of adverse impacts.

The Mission will review BEDE's environmental assessment procedures prior to executing the amendment to the Implementation Agreement. If the Mission feels that BEDE's procedures are inadequate, it will provide BEDE with technical assistance to set up and implement improved environmental assessment criteria and procedures.

F. Technical Assistance Requirements:

The same essential program outline still characterizes the National Shelter Delivery System with the addition of a supplemental authorization as in the original project design. The objective is to increase the absorptive capacity of the shelter sector, to increase the participation of public and private organizations not normally part of the shelter process, and to improve the coordination of public policy and private initiative.

As we have described earlier, the program has met some of its objectives more rapidly and completely than others. In particular, it has brought about the development of an entire new "line of products" developed by private entrepreneurs working on their own instead of simply as contracted builders for the JNV/BEV. In this sense, the program has capitalized on the strength and institutional infrastructure of an existing construction/financial industry, and brought about the development of a new, lower-cost line of housing that is affordable to lower-income families without the level of subsidies that has characterized past GOE program.

This supplement is presented in the context of increased interest in using FFH resources for even less-costly per-capita shelter improvements through infrastructure upgrading. In this context, the emphasis of the program's technical assistance needs shifts a bit more now toward municipal management and municipal finance, with the much more vigorous involvement of the BEDE/municipality/utility company mix that is added to the program.

This is not a program to teach water companies how to pump water, or sewage authorities where to put sewerage. Rather, it seeks to improve the understanding of the effects of alternate policy decisions by the public sector, with special focus on housing finance/production and on municipal finance and management.

44

Within the technical assistance program for municipalities, a new policy agenda item will be to work with utilities to develop policies that will permit them to recover fully their costs through tariff revisions, improved operating and management procedures, and reduced losses to leakage and un-metered consumption.

Also important is building a true counterpart, a "coalition" of interests in the housing/urban sector that will maintain a lively and constructive dialogue with AID. A research component in the technical assistance package will stimulate and support the creation of this coalition group.

The Mission proposes to emphasize three fields of technical assistance under this program:

1. Housing finance and production

- * Strengthen and improve the operation of the FFH at the Central Bank.
- * Improve the performance of the public sector to support, not displace, the private sector.
- * Stimulate a re-definition of its role by the private sector, to include attention to a broader range of families.
- * Mobilize additional resources for the sector, and increase the efficiency with which all sector resources are used.

2. Municipal finance and management:

- * Support for a wide range of actions in the areas of policy and regulatory reform.
- * Technical assistance to improve the financial administration capabilities of local governments and utilities.
- * Facilitate constructive dialogue between municipalities and other entities involved in the shelter production process.
- * Continue dialogue on improving the efficiency of the municipal role in property registry.

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- * Emphasize policy agenda with municipal utilities by providing technical assistance as needed to help move toward financial self-sufficiency, with emphasis on tariff reforms and improvements in operating and management practices.

3. Research and Evaluation

- * Through the Central Bank Technical Assistance program, the Mission will support studies on issues identified as important obstacles to the efficient operation of the shelter sector.

Useful and relevant information has been provided by a first round of investigations. Critical discussion and review of this information puts more relevance and practicality into the sector dialogue.

We have spoken earlier of a "coalition"-- a composite that reflects the concerns of all the parties affected by urban development and that provides (a) a framework in which those parties can talk to each other on common ground and (b) a true counterpart to AID's involvement in the shelter/urban sector in Ecuador.

We believe that the "coalition" will help generate discussion, analysis, some fresh re-evaluation of perspectives, and ultimately some consensus on the nature of the problem, the actions that might be taken to address them, and the appropriate roles of each party.

The research and evaluation efforts will support this process by helping to keep the questions for which there aren't any generally accepted answers on the table, and by continuing to test the consequences and implications of traditional responses.

IV. IMPLEMENTATION ARRANGEMENTS

A. Methods of Implementation and Financing

1. Methods of Implementation

As discussed previously in this PPS, the primary implementing agencies under this \$10 million amendment will be the BCE, BEDE and municipalities:

2/6

- Municipalities will design projects and submit them to BEDE for approval of financing. Once funds are approved, municipalities will monitor construction and, upon completion of construction, they will operate and maintain the projects. Municipalities will also be responsible for recovering construction and service costs from project beneficiaries.
- BEDE will be responsible for conducting feasibility analyses on projects presented by municipalities. Once a project is approved, BEDE will act as an intermediate financial entity (IFE) and request a loan through the BCE's Financial Fund for Housing. Once a project is completed, BEDE will recover its loan from the Municipalities and pay back the BCE.
- The BCE will discount loans for acceptable projects presented by BEDE through the FFH, keep required accounting documents for the program as well as work with other public and private sector IFEs in providing FFH funds for housing and home improvements.

USAID/Ecuador's role in this process is to monitor overall program implementation. It will not get involved in the design or the approval of individual projects. Implementation responsibility within the Mission lies with the Office of Housing and Urban Development (HUD).

2. Methods of Financing

The BCE will receive funds for the FFH from the GOE itself and from private lenders in the U.S. Loans from U.S. private lenders will be backed by the U.S. Treasury under the HG authority provided for this program.

3. Assessment of Host Country Capabilities

The Mission has worked closely with the BCE over the past four years to set up the FFH, and through this experience, feels that the BCE is capable of managing the fund. The Mission has also worked with BEDE in the past, and has been pleased with its programming and project management capabilities. As mentioned elsewhere, the Mission plans to conduct a more thorough assessment of BEDE's capabilities prior to amending the HG-007 Implementation Agreement for this \$10 million in additional HG authority. The Mission is aware of weaknesses and institutional shortcomings in municipalities. They are nevertheless the providers of essential urban services to urban families, and the Mission believes that it is important to support their efforts with this project.

47

B. Schedule for Implementation

Short-term implementation targets are:

Date	Target
1988	
September 30	Authorization of \$10 million amendment to HG-007 for urban infrastructure.
October 15	Notice to investors on first \$10 million loan under HG-007.
November 30	Amendment to Implementation Agreement for \$10 million supplement to HG-007 negotiated and signed.
November 30	RFP out on consulting contracts funded by grant to Central Bank.
November 30	First \$10 million contract on HG-007 negotiated and signed.
1989	
January 15	Contractor proposals due under Central Bank grant.
February 30	Contract awards under Central Bank Grant.

C. The longer term implementation considerations are largely cover in Annex 4 insofar as disbursement of the Financial Fund for Housing resources is concerned. Greater detail on the technical assistance programming will reflect the Mission's joint programming decisions following discussions with the Central Bank. This will take place during the balance of CY 1988.

4/8

V. EVALUATION AND AUDIT

A. Evaluations

The Mission plans to conduct an evaluation on the HG-007 program in mid-FY 89. The objectives of this evaluation will be: (1) to assess the Central Bank's administration of the program; (2) to evaluate the effectiveness of procedures for operation of the FFH; and (3) make recommendations for improvement in FFH operations. A final evaluation of the HG-007 program will be conducted in mid-FY 90. This evaluation will assess the overall programs progress towards meeting its goal of increasing the supply of low cost housing and other shelter services in Ecuador. Other factors that will be assessed include:

1. The effectiveness of the FFH mechanism in involving the private sector in housing finance;
2. The effectiveness of BEDE in administering loans to municipalities (including its technical capabilities as well its management capabilities);
3. The impact of infrastructure projects on health and socio-economic conditions in informal neighborhoods;
4. The effectiveness of AID's policy dialogue in changing GOE policies and regulations regarding interest rates, water tariffs, etc.

B. Certification of End Use/Audit

Certification of End Use

The municipal utility companies will prepare feasibility studies for the projects that will be financed under this program. In addition to technical, environmental and financial feasibility, projects must need a test of eligibility of the end users, the beneficiaries of the financial assistance which is provided. Projects will be put to this test in the context of a socio-economic assessment which is part of the feasibility package. Based on this information, the municipality must certify that the neighborhood which is to be upgraded is, in fact, comprised of low income families who are eligible for assistance as members of AID's target group.

BEDE will confirm the accuracy of the representations received from the municipality and will certify as to their accuracy to the Central Bank. BEDE will present to AID a copy of its certification.

49

As stages of infrastructure projects are completed, BEDE will confirm that all investments have been made as programmed for eligible neighborhoods in accordance with the approved project design. The Central Bank will monitor BEDE performance, including periodic field checks to confirm the accuracy of financial reports.

AID will further confirm that project resources have been invested in the production of eligible expenditures during project evaluations.

Audit

The Implementation Agreement for HG-007 states that the Central Bank shall maintain, in accordance with generally accepted accounting principles, books and records relating to the program and the loan. It further states that the Central Bank shall, until the loan is fully repaid, "arrange to have such books and records audited annually by independent auditors in accordance with generally accepted auditing standards. Such audit shall provide segregated accounting and comments regarding the loan and shall be submitted to AID annually". AID will review annual audits to ensure their compliance with the IA.

57

ANNEX 1

STORY OF LUCHA DE LOS POBRES

A recent Mission study looked at the process of development and the current status of Lucha de los Pobres, a representative informal settlement in Quito. In addition to summarizing the development of the community, the study identifies the principal problems from the perspective of community leaders and member of families interviewed for the study. The highest priority for improvements was ascribed to potable water and sewerage service.

The pages which follow present key findings from that study.

57

V. The Cooperative *Lucha de los Pobres*

The housing cooperative *Lucha de los Pobres* (Struggle of the Poor) is an informal settlement that came about through an invasion of the Hacienda Santa Ana, in the south east portion of the city of Quito. The purpose of the co-op was to develop a model low income housing community for families without access to shelter through conventional means. This objective of developing a model city was not achieved, but nevertheless, these people did obtain housing that they would not have otherwise had. Governmental institutions assisted this initiative, providing infrastructure and services.

History of the project

This co-op grew out of a pre-cooperative "Juan Montalvo" in 1982. This pre-cooperative organized an invasion in La Inmaculada in 1982, which is located in the southwest part of Quito, with a plan of establishing 180 lots for its members. This bold and successful experience initially did not meet with any repressive governmental actions. Inspired by this success, a group of leaders and members of the pre-cooperative began organization for a more ambitious endeavor.

By the end of 1982, these directors had developed an organization that was solid, well disciplined, technically competent and led by a left leaning political party, the "Frente Amplio de Izquierda FADI." They formed the housing cooperative *Lucha de los Pobres*, with an initial 100 members.

In the early months of 1983 the leadership of this co-op began the first contacts with Mrs. Archena Peñaherrera Perkins, owner of the Hacienda Santa Ana, with the goal of negotiating its purchase. Their proposal was rejected.

From that date forward, they began organizing to invade this hacienda. At the same time, they set up an office in downtown Quito, offering 180m² lots at a cost of S/. 206,000 [US\$437], hoping to increase their membership.

According to the founder of the co-op, the purpose of the housing co-op "*Lucha de los Pobres*" was to:

. . . develop a model housing project which would be called "*Ciudad Modelo de los Pobres*" (The Poor Peoples' Model City), for families of low incomes, who lacked the possibility of access to shelter through conventional means. It would be a model of affordable housing, with common areas, sport complex, food supplies. It would also have infrastructure, basic services and transportation.

Membership Requirements consisted of the following:

- 1) Possess no other real estate in the Province
- 2) Belong to no other housing cooperative
- 3) Have a minimum income of S/. 5,000
- 4) Pay a down payment of S/. 6,190
- 5) Pay S/. 2,000 upon moving onto the land
- 6) Pay additional legal expenses of S/. 3,000
- 7) Pay a non-refundable S/. 500 for office supplies
- 8) Pay S/. 500 per month for administrative expenses
- 9) Make regular monthly savings deposits within the family's economic possibilities

Based on these requirements, during the first six months of 1983, the co-op gained over 500 members. During this enrollment process the co-op held several general assemblies to plan the invasion of the Hacienda Santa Ana, which consists of 127 Hectares. .

Invasion Process and Initial Planning of the Settlement

On 21 August, 1983, the co-op's 500 members assembled at 10 p.m. where the South Panamerican highway meets the access road to the Hacienda. They had previously planned their steps, including payment by each member of the initial quota of S/. 500 to buy wood, zinc and supplies, in order to set up provisional housing and maintain control of the site. The five hundred members and their families, totally about 1,500 people including adults and children, divided into groups to begin the ascent to the highest part of the Hacienda.

Each group was under the direction of a leader, with each leader having detailed instruction on how to begin the occupation. The first group settled at the highest point, and placed families at previously determined strategic points. The second group settled somewhat lower, locating families at the east and north boundaries of the site. The following groups covered from east to west and from north to south until the entire Hacienda was occupied. [Source: former leader of the cooperative.]

The families began to immediately set up shelter, using plastic sheeting to protect themselves from the cold.

The organization then began to set up defense operations, with each group building trenches and tunnels in their sector, supplying themselves with Molotov cocktails and stone. In the most vulnerable parts of the site, they set up observation platforms and formed groups of four members who kept vigil. These groups were relieved every three hours.

Within the first few days, the organization grew in breadth and depth. The invasion in one week's time had succeeded in obtaining the support of other populist groups in the capital and in the provinces, and had also

significantly increased its membership, now having upwards of 3,000 people squatting on the site. Within one month, the organization consisted of 36 districts, with each group consisting of 100 families under the responsibility of a coordinator.

From August 1983 until January 1984 the Ministry of Government issued three eviction decrees, but never took any action to carry them out. This was largely due to the capability of the leadership of the co-op in negotiating with the owner of the land, and her mediation with the governmental authorities.

Before the fifth month of illegal occupancy, around 1,500 members left the group because of fear of eviction caused by a successful displacement in another illegal settlement nearby, adjacent to *La Ecuatoriana*.

Formal Leaders

The recognized leaders of the co-op were the directors who organized and participated in the planning and execution of the invasion. These leaders belonged to the *Frente Amplio de Izquierda* (FADI). New leaders arose from time to time, named in the co-op's assemblies to coordinate in each district.

The highest level of decision making in the co-op rested with the President, as advised by a coordinating committee made up of all the district coordinators.

Each district planned community activities and in this way they sketched out street plans, constructed community buildings in some districts, and helped members build houses with wood, zinc, block and mud. Great group cohesion and strong ties of solidarity were developed in this period.

Participating Institutions

Ministry of Social Welfare. Through the Office for the Protection of Minors, this Ministry was the first governmental institution that participated in this co-op, at the beginning of 1984 it began doing a study to determine the needs of the pre-school population. In January 1984, a training workshop was carried out for 45 mothers and young people regarding the contents of pre-school education. Today, this Ministry offers a nonconventional program of child care with various modalities. [These "nonconventional" programs arose in Ecuador in 1980 through an agreement between the Ministry of Social Welfare and UNICEF; they involve health, nutrition, psych-social development, social protection and community participation components.]

- Twelve community day care centers that care for 180 children from ages 0 to 5 years;
- Two community day care centers that care for 160 children from the ages of 3 to 6 years;
- One community day care center that cares for 80 children from ages of 0 to 6;
- One communications workshop that produces a newspaper
- One library with 120 volumes for students (colegio)
- One tanker truck for the provision of water to the community
- Five playgrounds

Ministry of Education and Culture

In 1984, the community constructed the school "Nicolás Guillén" of block, clay and zinc. This school had at the time of construction a capacity for 300 students. [Additional classrooms have since been added.] The Ministry of Education and Culture funded eight professors.

Ministry of Public Health

In 1986, this Ministry implemented a sub-center of health with services of a doctor two hours per day, a nurses' aide and an aide. This center operates from Monday through Friday, offering health care for both prevention and cure. Staff provide training for female heads of households, and in cases of malnutrition, the clinic offers meals.

The Municipality

In 1986, in the administration of Mayor Gustavo Herdoíza, eight school rooms were donated, with a total value of S/. 16,000,000, and added to the six rooms provided under the Provincial Council of the administration of Dr. Fabián Alarcón, for the school Nicolás Guillén, which has 450 children today.

The Municipality of Quito collaborated with the installation of definitive streets, which are currently being paved with stones.

Power Company

During the year 1986, 5 transformers were installed, and electric wiring was provided from the Panamerican Highway to the east road, with S/. 5,000,000 from Congress, through the assistance of the FADI congressman, and S/. 5,000,000 through the candidacy of Mr. Rodrigo Paz, now the Mayor.

In January, 1988, the National Congressman of the FADI party obtained an additional S/ 4,500,000 from Congress to provide electric wiring from the east road to the Camino de los Incas.

DINADER

At the end of 1986 DINADER installed a sports areas, complete with fields for soccer, basketball, volleyball and indoor soccer.

Community Youth Development

In the beginning of June, 1987, this organization began a health training project, but it is not yet in force due to limited funds.

Process of Consolidating the Cooperative

As in the case of any spontaneous settlement, each member family originally located its home on a provision lot. After three years the cooperative began to redistribute lots definitively. This was done in three phases, and by sector. Lots were distributed according to these criteria:

- Seniority
- Minimum savings of S/. 15,000
- Active participation in the organization
- Compliance with the internal rules and regulations of the co-op
- Respect for the decision of the member to remain on the original lot.

At this time there are 2,496 members situated at the co-op, with 180 square meter lots. There are corner lots as well, which are 320 and 350 meters square. According to one director in opposition to FADI, "[these] lots . . . are held by privileged members of the leadership."

Origins of the Members of the Cooperative

Based on a study carried out by the Ministry of Social Welfare in August, 1987, the following chart reflects the origins of the members:

%	Origin
31.4	Loja
16.5	Cotopaxi
12.8	Pichincha
11.4	Bolívar
8.3	Chimborazo
4.1	Tungurahua
2.8	Azuay
2.8	El Oro
2.4	Imbabura
2.0	Los Ríos
5.5	Other locations

Construction Process

The housing construction was carried out by each member through self help, in accordance with that member's economic situation. The Municipality of Quito has not objected to the construction standards. However, the city has required a 3 meter setback. Construction is predominantly block, clay and zinc. Those families with access to financing sources and other families who managed some savings through other means, constructed with cement, block and reinforcing bars, adding a second story.

According to a leader from the Ministry of Social Welfare and UNICEF program, "this construction is done primarily with family labor, contracting with a maestro from the co-op itself, who would charge less than other brought from outside."

The survey of 300 families conducted in this study indicates that 80.3% of those interviewed had built with block; 12% built primarily with wood; 6.4% from a mixture of wood and block; and 3% with other materials.

Housing Models

With the same survey data as a reference, the types of construction are as follow:

%	Type of Unit
82.2%	"Mediaguas" (house with one room of block, mud and zinc)
16.2%	"Single family homes" (with two rooms built from block, cement, eternit)
1.6%	"Complete homes" (with bedrooms, living room and kitchen)

Nearly all the homes are owned by the residents: 95.7%, with 1.4% rented and 2.9% in other categories.

Beginning in 1987, the cooperative attempted to arrange construction and home improvement loans with several Mutual Savings associations and with the San Francisco de Asis Credit Union, all to no avail, largely due to internal opposition in the cooperative.

According to one director, the Ecuadorian Cooperative Bank has made home improvement loans available to nearly 300 members. Nevertheless, the Bank is no longer making loans [it is in receivership]. Loans up to S/. 280,000 were made. Other funds came from family savings.

57

Internal Community Organization

From the invasion and the first months of settling in, the FADI group generated a progressive organization with a primary focus on controlling the land. The strength of this group has dwindled, until the point that it was overcome by an opposing group: Colonia Lojana. On October 25, 1987, elections were held and the Colonia Lojana group won by one vote: 367 to 366, with a third group obtaining 270 votes.

Numerous organizations exist within the community, including the former leadership (FADI group); the Frente de Reinvidicaciones y Defensa de la Cooperativa; the Frente Pro-desarrollo de la Cooperativa; the Comité Pro Mejoras; neighborhood sporting groups with 25 boys clubs and 12 indoor women's clubs; and a youth cultural workshop, which has fallen into virtual inactivity.

Current Situation of the Cooperative

As a result of the October 1987 elections in which the FADI board was displaced, in which two opposing groups were unable to achieve half plus one vote as required by the By-Laws, there is an absence of power.

After an unsuccessful attempt to form a coalition board of directors, and based on a lack of confidence on the part of the membership, the National Office for Cooperatives within the Ministry of Social Welfare placed the cooperative in Receivership.

From October 1987 until June 1988, five different Receivers have been named, to date none of which has completed an audit of the co-op.

Legal Situation

In 1984, as a result of the negotiation with the owner of the Hacienda to avoid displacement, a contract of sale was entered into for a price of S/. 297,000,000 (US\$639,000), with 22% annual interest. On that date, an account was opened in the Bank *Caja de Crédito Agrícola*, which is an agent of the Wholesale Market near the co-op. Each member makes deposits in this bank account, and to date the balance has been reduced to S/. 35,000,000, plus the respective interest.

In 1985, the co-op held a competition of five firms to prepare the site plan. They selected the company INCOVIC, which prepared the plans and submitted them to the municipality for its approval. This is still in process.

When the site plan is approved, the owner will give global title to the co-op, which in turn will prepare individual ownership documents for each member, upon completion of lot payments.

At the current time, there are only provision titles to the land, provided by the owner. The members have the *minuta* to process the title, and the *acta* granted by the Peñaherrera family and the Office of Cooperatives. Based on this procedure, 2,496 lots have been adjudicated.

Problems Confronting the Community

Directors and families interviewed indicated the following as priorities for immediate solutions:

- 1) Potable water, which is currently supplied by a tanker truck donated by the Ministry of Social Welfare, for 2,496 families. Pre-feasibility studies have been carried out to look at the possibility of providing water from springs of the City and INCOVIC.
- 2) Waste water system, as the current system of waste water removal is chaotic, generating a grave health problem.
- 3) Solid waste collection. These are sources of contamination and they cause illness for the children.
- 4) Transportation. There are four vans and one small bus that charge S/. 20, although they operate without proper authorization from the Transportation Department. Efforts have been undertaken to obtain a bus line from the co-op to the city center.

Conclusions

1. The initial objectives of the co-op were really unreachable: develop a model housing project "Model City for the Poor", with complete infrastructure including basic services, community buildings, sports complexes, transportation, food supply. These objectives were not all achieved. However, the people did obtain housing, which in other circumstances would not have been possible. Furthermore, the build-out process has been considerable in the five years of the project.
2. Keeping in mind that this is an informal settlement that obtained the land through an invasion, and as part of a political action, and whose plan was that of creating a model city for the poor, the project has fallen on its face, because the leadership of the co-op could not manage the process, and lapsed into dishonest procedures, including proselytism and influence peddling, which gradually eroded the support for the leadership.

3. Despite the fact that the families did not have formal sources of financing, mechanisms developed within the community itself helped the build-out process. The community now has important achievements in terms of infrastructure and construction of homes.
4. From its beginning, this settlement was successful in gathering the support of government agencies, which translated into concrete actions and accomplishments: stone paving of the streets; electric lights; transportation; schools; health services; sports; recreation; educational services.
5. The community dynamic of this housing cooperative takes its shape from the law governing these informal settlements. The co-op is becoming a community organization that is less political and more oriented toward completion of improvements.

This tendency is progressively taking hold, since it represents the majority of the residents. At the same time, the minority groups that have been splintering the community are losing their hold.

60

ANNEX 2

PROGRAM IMPLEMENTATION AND OPERATIONAL DOCUMENTS

The principal documents developed for the operation of the FFH are attached (partial copies for lengthy agreements). Considerable work was done in establishing the fund itself and all of the required instruments for its operation and management.

CONVENIO SUBSIDIARIO

ENTRE

EL BANCO CENTRAL DEL ECUADOR Y

PARA EL FONDO FINANCIERO PARA LA VIVIENDA

ARTICULO I El Convenio Subsidiario

- Sección 1.01 Definiciones
- Sección 1.02 Antecedentes y Presupuesto

ARTICULO II Características de las Soluciones Habitacionales

- Sección 2.01 Tipos de Soluciones Habitacionales
- Sección 2.02 Ubicación de las Soluciones Habitacionales
- Sección 2.03 Precios Máximos de Venta

ARTICULO III Características de los Préstamos Elegibles

- Sección 3.01 Beneficiarios de los Préstamos Elegibles
- Sección 3.02 Montos Máximos de los Préstamos Elegibles
- Sección 3.03 Plazos de los Préstamos Elegibles
- Sección 3.04 Tasa de Interés de los Préstamos Elegibles
- Sección 3.05 Formas de Pago de los Préstamos Elegibles
- Sección 3.06 Fechas de Formalización de los Préstamos Elegibles

ARTICULO IV Características de los Descuentos del FFV

- Sección 4.01 Calificación de la Entidad Financiera Intermediaria
- Sección 4.02 Montos de los Descuentos
- Sección 4.03 Plazos de los Descuentos
- Sección 4.04 Tasas de Interés de los Descuentos
- Sección 4.05 Formas de Pago de los Descuentos
- Sección 4.06 Cupos para las Entidades Financieras Intermediarias
- Sección 4.07 Reservación de los Recursos del FFV
- Sección 4.08 Procedimientos y Documentación para los Descuentos

ARTICULO V Compromisos Generales

- Sección 5.01 Compromisos del Banco Central del Ecuador
- Sección 5.02 Compromisos de la Entidad Financiera Intermediaria

BEST AVAILABLE DOCUMENT

62

ARTICULO VI Compromisos Especiales

Sección 6.01

ARTICULO VII Otras Disposiciones

- Sección 7.01 Enmiendas o Modificaciones
- Sección 7.02 Cartas de Instrumentación
- Sección 7.03 Duración de este Convenio
- Sección 7.04 Terminación
- Sección 7.05 Comunicaciones
- Sección 7.06 Representantes Autorizados
- Sección 7.07 Prevalencia de este Convenio sobre Acuerdos Anteriores

ANEXO A Definiciones

- 1. Areas Urbanas
- 2. Soluciones Habitacionales
- 3. Construcción Nueva
- 4. Lote con Servicios
- 5. Construcción en Lote Propio
- 6. Mejoramiento Habitacional
- 7. Promotor
- 8. Ingreso Familiar Mensual
- 9. Ingreso Mediano
- 10. Familia Elegible
- 11. Beneficiario
- 12. Entidad Financiera Intermediaria (EFI)
- 13. Préstamo Elegible
- 14. Precio Máximo de Venta
- 15. Préstamo Máximo

ANEXO B Procedimientos y Documentación para los Descuentos

- a. Información Sumaria para los Descuentos
- b. Formularios
- c. Certificaciones
- d. Contrato de Préstamo
- e. Pagares

ANEXO C Regulaciones del Fondo Financiero para la Vivienda

- 1. Regulación No. 364-86 de la Junta Monetaria
- 2. Regulación No. 412-87 de la Junta Monetaria

BEST AVAILABLE DOCUMENT

63



MINISTERIO DE FINANZAS
SECRETARIA DE CREDITO PUBLICO

CONVENIO DE INSTRUMENTACION

AID-518-HG-007

CONTRATO DE AGENCIA FISCAL Y FINANCIERA ENTRE
EL GOBIERNO DE LA REPUBLICA DEL ECUADOR
Y EL
BANCO CENTRAL DEL ECUADOR

Quito, a 22 de septiembre de 1986

BEST AVAILABLE DOCUMENT

1.6.1

CONTRATO DE AGENCIA FISCAL Y FINANCIERA

En Quito, el Gobierno de la República del Ecuador (a: que en adelante se denominará "El Gobierno"), representado en este Contrato por el señor Ministro de Finanzas y Crédito Público, Economista Alberto Dahín Garzosa, debidamente facultado por el Decreto Ejecutivo 1412 del 17 de diciembre de 1985, publicado en Registro Oficial No. 337 del 18 de diciembre de 1985, por una parte; y por otra, el Banco Central del Ecuador (a: que se denominará "Banco Central"), representado por su Gerente General, Doctor Carlos Julio Emanuel, convienen en celebrar el siguiente contrato de Agencia Fiscal y Financiera.

POR CUANTO mediante Convenio de Instrumentación No. AID 518-HG-007, fechado el 15 de enero de 1986 (en adelante denominado "Convenio"), la Agencia Internacional para el Desarrollo (en adelante denominada "AID") conviene en garantizar las obligaciones de reembolso del Préstamo, que será concedido por un prestamista particular de los Estados Unidos (en adelante denominado "Prestamista Particular"), al Gobierno, por la suma de US\$ 30'000.000.00 (en adelante denominado el "Préstamo") con el propósito de incrementar la oferta de vivienda de bajo costo en el Ecuador, de conformidad con los términos y condiciones señalados en el Convenio y en los siguientes convenios conexos que deberá suscribir el Gobierno para el efecto: a) Convenio de Préstamo con el Prestamista Particular; b) Contrato de Garantía con AID; c) Convenio de Garantía con AID; y, d) Convenio de Pagos de transferencia de fondos con una institución financiera de los Estados Unidos, designada por la AID.

POR CUANTO, de acuerdo a los artículos 98 y 99 de la Ley de Régimen Monetario y Artículo 120 de la Ley Orgánica de Administración Financiera y Control, el Banco Central es Agente Fiscal y Financiero de la República para la administración y servicio de los préstamos que contrate en el exterior, y en virtud del Decreto Supremo No. 374 de 5 de abril de 1973, que crea el mecanismo de Fondos Financieros, se halla facultado para la administración de los fondos de esta clase de préstamos.

POR TANTO, las partes de este Contrato de Agencia Fiscal, acuerdan lo siguiente:

ARTICULO I

Los diferentes términos usados en el presente Contrato, a menos que del contexto del mismo se incluya que deban entenderse de

65

Banco Central del Ecuador GERENCIA DE CREDITO Y VALORES	SOLICITUD DE CREDITO FONDO FINANCIERO PARA LA VIVIENDA	NUMERO:		
		AÑO	MES	DIA

OFICIO No.:

FECHA:

Señores
BANCO CENTRAL DEL ECUADOR
 Oficina en

Me permito presentar a descuento con cargo al Fondo Financiero de la Vivienda, los siguientes documentos de crédito cuyas especificaciones constan al reverso; además, certifico que estos préstamos han sido notificados a la Superintendencia de Bancos de acuerdo con la clasificación del crédito establecida en la correspondiente resolución.

Autorizo al Banco Central del Ecuador, expresa e irrevocablemente, para que debite automáticamente en la(s) cuenta(s) corriente(s) que mantenemos en ese Banco, el valor de cada uno de los documentos ya sea a su vencimiento o antes si incurriere en cualesquiera de las circunstancias según las cuales el acreedor original pudiera declarar los documentos de plazo vencido, caso en el cual se comunicará de inmediato al Instituto Emisor, sin necesidad de trámite judicial alguno.

Certifico que los préstamos de la presente solicitud cumplen con todos los requisitos de elegibilidad para que participen los sujetos de crédito en el mencionado Fondo, establecido mediante Regulación de Junta Monetaria No. 364-86 y demás disposiciones legales vigentes a la fecha de esta solicitud.

Atentamente,

 Firma Autorizada y Sello de la EPI

BANCO CENTRAL DEL ECUADOR
GERENCIA DE CREDITO Y VALORES

FONDO FINANCIERO PARA LA VIVIENDA IDENTIFICACION DEL SUJETO DE CREDITO (BENEFICIARIO)					
NOMBRE	CEDULA DE IDENTIDAD	INGRESO FAMILIAR	A	DIVIDENDO MENSUAL INICIAL	B
				%	B/A
PROVINCIA	CIUDAD	CANTON	PARROQUIA	SITIO	HABITANTES
ENTIDAD FINANCIERA INTERMEDIARIA (EFI)	FECHA APROBACION (EFI)	GARANTIA	VIVIENDA		PRECIO DE VENTA
					(a)
APORTE SUJETO DE CREDITO	b/a	%	MONTO DEL PRESTAMO (a-b)		APORTE DE LA E.F.I. d/c
		(b)		(c)	(d)
VALOR DEL DESCUENTO (c-d)	INTERES SUBPRESTAMO		PLAZO	TASA DE INTERES DEL DESCUENTO	
S/	(e)	%			%
DESTINO DE LA INVERSION					
SOLUCION HABITACIONAL NUEVA		CONSTRUCCION EN LOTE PROPIO		MEJORAMIENTO HABITACIONAL	
	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
LOTE CON SERVICIOS					
	<input type="checkbox"/>				

FORM HG-007-004

28

CONTRATO DE PRESTAMO

DE FECHA DE 19

ENTRE

El Banco Central del Ecuador (BCE), en representación del Gobierno de la República del Ecuador (el Gobierno) en virtud del Contrato de Agencia Fiscal y Financiera celebrada entre el Gobierno y el BCE con fecha 22 de septiembre de 1986, por una parte y la otra, _____, la Entidad Financiera Intermediaria (EFI), (las Partes).

ARTICULO I: EL CONTRATO

Sección 1.01: Antecedentes y Propósito

El _____ de _____ de 19____ el BCE y el EFI suscribieron un Convenio Subsidiario en el cual se establecieron las condiciones bajo cuáles se operarán el BCE y la EFI con respecto al Fondo Financiero para la Vivienda (FFV), el mismo que se incorpora como referencia al presente Contrato.

Este Contrato establece las condiciones bajo las cuales el BCE conviene en descontar a la EFI documentos presentados a base de Préstamos Elegibles a descontar con el FFV.

Sección 1.02. Definiciones

Si no se definen de otra forma en el texto de este Contrato, los términos utilizados en este Contrato tendrán las mismas definiciones de las del Convenio Subsidiario.

Sección 1.03 Integración

Los documentos enumerados en la Sección 4.08 del Convenio Subsidiario, y sometidos al BCE con la solicitud de este Descuento, forman parte de este Contrato.

ARTICULO II: CARACTERISTICAS DEL DESCUENTO DEL FFV

Sección 2.01 Monto del Descuento

El monto de este Descuento del FFV es de S/ _____, correspondiente a _____ Préstamos Elegibles presentados, con un valor total de S/ _____.

Forma parte de este contrato la nómina de Préstamos Elegibles, y queda convenido que los préstamos que por alguna circunstancia se salieren del marco de elegibilidad deberán ser sustituidos por otros Préstamos Elegibles, o en su defecto, la EFI deberá abonar el importe correspondiente al descuento de los préstamos no elegibles.

Sección 2.02 Plazo del Descuento

El plazo del Descuento es de _____ meses.

Sección 2.03 Tasa de Interés del Descuento

La tasa de interés a cobrarse inicialmente es _____ % anual sobre saldos. Esta tasa de interés será reajustada cada vez que vence un período de pago del Descuento, siempre que durante el período desde la última fecha de pago, la Junta Monetaria hubiera modificado la tasa de interés vigente para los

69

descuentos del FFV. En caso de que durante el período se hubiere producido más de una variación en la tasa de interés, se aplicará la última decidida por la Junta Monetaria.

A su vez, la tasa de interés que cobrará la EFI a los Beneficiarios podrá ser reajustada, observando el procedimiento establecido por las Regulaciones de la Junta Monetaria y las Resoluciones de la Superintendencia de Bancos, manteniéndose un máximo de 5 puntos de margen entre la tasa de interés vigente del Descuento y las tasas de interés de los Préstamos Elegibles descontados.

Las tasas de interés del Descuento serán calculadas a base de un año de 360 días sobre los saldos pendientes de pago.

Sección 2.04 Forma de Pago del Descuento

La EFI pagará el Descuento recibido en esta fecha por medio de cuotas semestrales consecutivas, debiendo pagar la primera cuota el día _____ de _____ de 19____, de conformidad con la tabla de amortización adjunta. La tabla de amortización será sustituida con una tabla actualizada cada vez que se modifique la tasa de interés vigente para el Descuento.

La EFI autoriza en forma expresa e irrevocable al BCE para que sin necesidad de requisito alguno, efectúe los débitos correspondientes a las obligaciones contraídas por la EFI en relación a este Descuento, con cargo a los fondos existentes en la(s) cuenta(s) corriente(s) que la EFI mantenga abierta(s) en el BCE.

Si fuere del caso, la EFI suscribirá pagarés a la orden del BCE, sustituibles semestralmente de otras, por la fracción de los intereses que, por las características del Descuento acordado, se financian, a través de su capitalización.

Todo pago que, conforme a lo establecido en este Contrato, debiera llevarse a cabo en un día no hábil, se entenderá válidamente efectuado el primer día hábil inmediato siguiente.

Ambas partes aceptan el presente Contrato en lo que a cada cual concierne y lo suscriben en señal de conformidad en la ciudad de _____ el día y año indicado al principio de este Contrato.

Banco Central del Ecuador

Entidad Financiera Intermediaria

0253E

ANNEX 3

Detailed listing of projects to be discounted by the Financial Fund for Housing.

This is the material from which Table 4 has been extracted:

Page 1: corresponds to Category A.

Page 2: includes Category B, C and D

Page 3: the Category E, through project No. 16

Projects 17 through 35 are not included in any of the categories in Table 4

71

PRIVATE SECTOR SHELTER SOLUTIONS PROGRAMMED FOR FINANCING UNDER THE FINANCIAL FUND FOR HOUSING MECHANISM

ANNEX 3

02-Sep-88

PAGE 1

(Home improvement programs and shelter projects completed or now under construction.)

TOTALS ----- >> 7,210 6,394,635 5,772,644 12,583,640 9,437,730

NO.	INTERMEDIARY FINANCE ENTITY	PROJECT LOCATION	PROJECT NAME	DEVELOPER	NO. SOLUTIONS	AVERAGE LOAN (sucres) (x1000)	TOTAL AMT. OF LOANS (sucres) (x1000)	% DISC.	FFH DISCOUNT (sucres) (x1000)	EXCH. RATE	FFH DISCOUNT (us\$)	H6 PORTION OF DISCOUNTS (us\$)
1	Mut. El Oro	Machala	Home Improvement Loans	Mut. El Oro	27	300	8,100	100.0	9,100	150	54,000	40,500
2	Fin. Manabi	Quito	Home Improvement Loans	Coop. Snfco de A.	850	148	125,800	97.0	122,026	150	813,507	610,130
3	Fin. Manabi	Portoviejo	Home Improvement Loans	Coop. 15 de Abril	907	105	95,235	97.0	92,378	150	615,853	461,890
4	La Previsora	Quito	Eden del Valle	PILARES	77	800	61,600	90.0	55,440	500	110,880	83,160
5	FILANBANCO	Guayaquil	Los Rosales	Const. FEDARCO	343	900	308,700	90.0	277,830	500	555,660	416,745
6	Mut. Guayaquil	Guayaquil	Montebello I.	PAVID - ETINAR	300	800	240,000	90.0	216,000	500	432,000	324,000
7	FILANBANCO	Guayaquil	Las Orquideas	Inmob. Amalia	695	1,200	834,000	90.0	750,600	500	1,501,200	1,125,900
8	FILANBANCO	Guayaquil	Las Orquideas	Inmob. Elenita	709	1,200	850,800	90.0	765,720	500	1,531,440	1,148,580
9	FILANBANCO	Guayaquil	Las Orquideas	Agricola Acuarela	476	1,200	571,200	90.0	514,080	500	1,028,160	771,120
10	Mut. Guayaquil	Guayaquil	Las Orquideas	Agricola Acuarela	1,057	1,200	1,268,400	90.0	1,141,560	500	2,283,120	1,712,340
11	Mut. Guayaquil	Guayaquil	Las Orquideas	Inmob. Esperanza	818	1,200	981,600	90.0	893,440	500	1,766,880	1,325,160
12	Bco. del Pacifico	Manta	Paola III	J. Cevallos	34	700	23,800	95.0	22,610	500	45,220	33,915
13	Mut. Guayaquil	Guayaquil	Montebello II	PAVID - ETINAR	595	1,200	714,000	90.0	642,600	500	1,285,200	963,900
14	La Previsora	Guayaquil	Ebanos (Los Vergeles)	Douglas MacCliff	72	1,200	86,400	90.0	77,760	500	155,520	116,640
15	Bco. del Progreso	Milagro	Rosa Maria I.	Lister Andrade	250	900	225,000	90.0	202,500	500	405,000	303,750

RL

02-Sep-99

(Note that private developers, in addition to the JMV (public), are also financing their projects through the National Housing Bank (DEV).)

TOTALS ----- >> 7,841 5,041,480 4,689,440 9,378,880 7,034,160

NO.	INTERMEDIARY FINANCE ENTITY	PROJECT LOCATION	PROJECT NAME	DEVELOPER	NO. SOLUTIONS	AVERAGE LOAN (sucres) (x1000)	TOTAL OF LOANS (sucres) (x1000)	% DISC.	FFH DISCOUNT (sucres) (x1000)	EXCH RATE	FFH DISCOUNT (us\$)	HS PORTION OF DISCOUNT (us\$)
1 DEV		Izaura	Yanzatza	JMV	20	1,000	20,000	90.0	18,000	500	36,000	27,000
2 DEV		Macara	Macara I	JMV	9	1,000	9,000	90.0	8,100	500	16,200	12,150
3 DEV		Gualaceo	Gualaceo II	JMV	7	1,000	7,000	90.0	6,300	500	12,600	9,450
4 DEV		Quito	Turubamba Pajo	JMV	24	1,200	28,800	90.0	25,920	500	51,840	38,880
5 DEV		Sto. Domingo	Rosales II	JMV	16	1,000	16,000	90.0	14,400	500	28,800	21,600
6 DEV		Guaranda	Los Trigales	JMV	143	1,000	143,000	90.0	128,700	500	257,400	193,050
7 DEV		Loja	Los Geranios	JMV	238	1,000	238,000	90.0	214,200	500	428,400	321,300
8 DEV		Quito	Los Andes	JMV	63	1,200	75,600	90.0	68,040	500	136,080	102,060
9 DEV		Olavalo	Los Lagos	JMV	13	1,000	13,000	90.0	11,700	500	23,400	17,550
10 DEV		Jipijapa	Maripita Ponce	JMV	148	1,000	148,000	90.0	133,200	500	266,400	199,800
11 DEV		Guayaquil	Esteros III	JMV	102	1,200	122,400	90.0	110,160	500	220,320	165,240
15 DEV		Tulcan	Fuente Enriquez	JMV	125	1,000	125,000	90.0	112,500	500	225,000	168,750
16 DEV		Latacunga	Las Fuentes	JMV	21	1,000	21,000	90.0	18,900	500	37,800	28,250
17 DEV		Latacunga	Los Nevaños	JMV	42	1,000	42,000	90.0	37,800	500	75,600	56,700
18 DEV		Cuenca	Bosque Monay I	JMV	489	1,000	489,000	90.0	440,100	500	880,200	660,150
19 DEV		Portoviejo	Los Tamarindos IIIB	JMV	94	1,000	94,000	90.0	84,600	500	169,200	126,900
20 DEV		El Carmen	Atenas II	JMV	62	1,000	62,000	90.0	55,800	500	111,600	83,700
21 DEV		Caiceta	Camilo Ponce	JMV	159	1,000	159,000	90.0	143,100	500	286,200	214,650
22 DEV		Marcelino M	Urban infrastructure	SAISC	1,000	100	100,000	100.0	100,000	500	200,000	150,000
23 DEV		Marcelino M	Los Parques	SAISC	200	1,000	200,000	90.0	180,000	500	360,000	270,000
24 DEV		Loja	Coop. Union Lojana	Coop Union Lojana	192	600	115,200	95.0	109,440	500	218,880	164,160
25 DEV		Sto. Domingo	Coop Brisas / Colorado	Coop. Brisas/Colorado	296	400	118,400	100.0	118,400	500	236,800	177,600
26 DEV		Sto. Domingo	Coco, Chiquilpe	Coop. Chiquilpe	98	460	45,080	100.0	45,080	500	90,160	67,620
27 DEV		Quevedo	Los Angeles	Eduardo Falla	134	1,000	134,000	90.0	120,600	500	241,200	180,900
28 DEV		Esmeraldas	Urban. Siharitat	SINHARITAT	296	1,000	296,000	90.0	266,400	500	532,800	399,600
29 DEV		Quito	Coop. Ejercito Nac.	Coop. Ejercito N.	850	1,200	1,020,000	90.0	918,000	500	1,836,000	1,377,000
30 DEV		Various	Home Improvement Loans	DEV	3,000	400	1,200,000	100.0	1,200,000	500	2,400,000	1,800,000

73

02-Sep-88

(Projects, with land and designs, nearing construction stage)

TOTALS ----->> 10,728 10,966,800 9,902,315 19,804,630 14,853,473

NO.	INTERMEDIARY FINANCE ENTITY	PROJECT LOCATION	PROJECT NAME	DEVELOPER	NO. SOLUTIONS	AVERAGE LOAN (sucres) x1000	TOTAL AMT. OF LOANS (sucres) x1000	% DISC.	FFH DISCOUNT (sucres) x1000	EICH RATE	FFH DISCOUNT (us\$)	HS PORTION DISCOUNT (us\$)
1	Mut. Benalcázar	Quito	Buenaventura	SIPCO	1,900	1,100	2,090,000	90.0	1,881,000	500	3,762,000	2,821,500
2	La Previsora	Guayaquil	Pulsolqui (Ctro Vial)	Constructora LPV	1,780	1,100	1,958,000	90.0	1,762,200	500	3,524,400	2,642,300
3		Quito	Cd. Satellite del Sur	E. Carvajal & R.	1,612	1,100	1,773,200	90.0	1,595,880	500	3,191,760	2,393,820
4	Mut. Prev. y Seg.	Guayaquil	La Providencia	ALUFORT (Loayza)	1,200	1,100	1,220,000	90.0	1,188,000	500	2,376,000	1,782,000
5	Mut. Guayaquil	Guayaquil		Mut. Guayaquil	800	1,100	880,000	90.0	792,000	500	1,584,000	1,188,000
6	FINANSA	Guayaquil	Montecarlo	J. Velazco/FINANSA	600	1,100	660,000	90.0	594,000	500	1,188,000	891,000
7	Mut. Guayaquil	Guayaquil	Montebello II	PAVID - ETINAR	595	1,100	654,500	90.0	589,050	500	1,178,100	883,575
8	Fin. Andes	Quito	Eden del Valle III	Viviendopopular	500	1,100	550,000	90.0	495,000	500	990,000	742,500
9		Ranta	Paola IV	J. Cervillos	315	900	283,500	90.0	255,150	500	510,300	382,725
10	Bco. de Prestamos	Quito	San Jose	Casares	500	500	250,000	95.0	237,500	500	475,000	356,250
11		La Mana	La Mana	Enrique Chicaiza	160	1,100	176,000	90.0	158,400	500	316,800	237,600
12	Fin. Andes	Quito	Eden del Valle II	Viviendopopular	252	500	126,000	95.0	119,700	500	239,400	179,550
13	Mut. Inabura	Ibarra	Defensa Civil	PILARES	200	500	100,000	95.0	95,000	500	190,000	142,500
14	Bco. del Pacifico	Cuzcaba	Coop. CEPE	Coop. CEPE	190	450	85,500	95.0	81,225	500	162,450	121,838
15	Fin. Manabi	Latacunga	Asoc. Prof. Vasconez	Asoc. P. Vasconez	103	400	41,200	100.0	41,200	500	82,400	61,800
16	Mut. El Oro	Machala	Primavera	Carlos Belle	21	900	18,900	90.0	17,010	500	34,020	25,515

PROJECTS WITH LAND IN EARLY STAGES OF DEVELOPMENT (NOT INCLUDED IN THE TOTALS OF THIS TABLE)

17		Quito	El Rancho	Uda / Rosas	1,000	1,100	1,100,000	90.0	990,000	500	1,980,000	1,485,000
18		Loja	Coop. Pio Jaramillo	C. Pio Jaramillo	250		0	90.0	0	500	0	0
19	La Previsora	Quito	El Balcon	Sonzalo Figueroa	900	1,100	990,000	90.0	891,000	500	1,782,000	1,336,500
20		Tonsupa	Club Pacifico	Club Pacifico	20		0	90.0	0	500	0	0
21		Latacunga	Asoc. Ramon Barba	Asoc. Ramon Barba	62		0	90.0	0	500	0	0
22	Bco. Azuay	Guayaquil	Los Rosales II	Const. FEDARCO		1,100	0	90.0	0	500	0	0
23		Loja	Coop. B de Diciembre	C. B de Diciembre	130		0	90.0	0	500	0	0
24		Fortoviejo		Cesar Arroyo	150		0	90.0	0	500	0	0
25	Bco. Azuay	Guayaquil	Cimas de Sasanes	Coop. Paz y Amor		1,100	0	90.0	0	500	0	0
26		Quito	Candicho	Educo ELM	4,000		0	90.0	0	500	0	0
27		Sto. Domingo	Prog. Rodas	Fco. Mascoso	120		0	90.0	0	500	0	0
28		Latacunga	Coop. UNE	Coop. UNE	42		0	90.0	0	500	0	0
29		Esmeraldas	La Florida	Hilton Estreban	268		0	90.0	0	500	0	0
30		Sto. Espinosa	Anturios	Carlos Bzdach	2,800		0	90.0	0	500	0	0
31	Mut. Benalcázar	Quito	C. Lucna de los Pobres		550		0	90.0	0	500	0	0
32		Quito	Sofco. de Asis del Sur	Ciudades L.		1,100	0	90.0	0	500	0	0
33	La Previsora	Machala	Machala I	CUVICA	90	900	72,000	90.0	64,800	500	129,600	97,200
34	Fin. Manabi	Latacunga	Coop. Vasconez Covi	Coop. Vasconez C.		600	0	95.0	0	500	0	0
35		Quito	Gonzalez Suarez		200	1,100	220,000	90.0	198,000	500	396,000	297,000

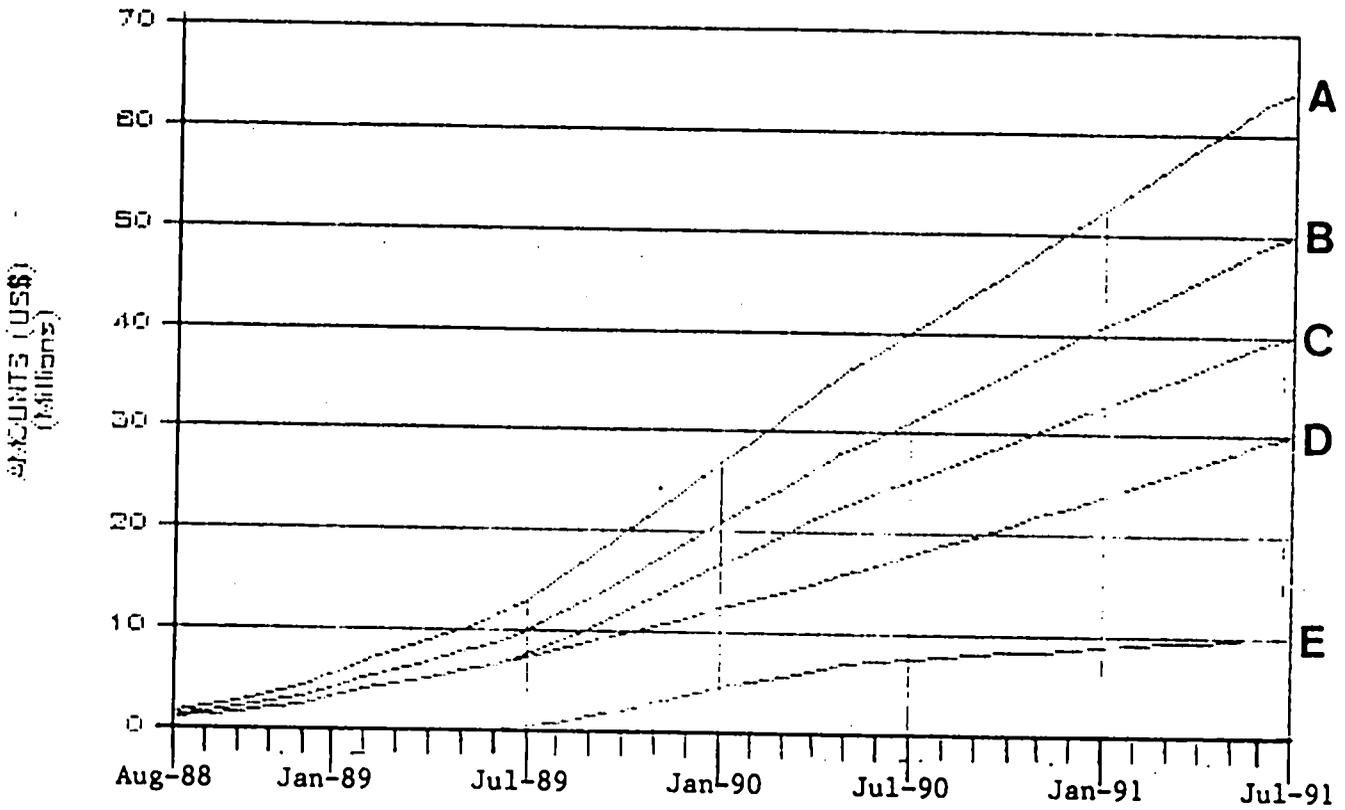
74

ANNEX 4

The attached tables reflect project discounts from the Financial Fund for Housing. These tables show disbursements of both the US\$30 million currently authorized for projects now in process as well as the supplemental US\$10 million for municipal infrastructure upgrading initiatives.

These disbursements projections are also represented on a compound graph which indicates the value of the shelter finance, the total activity of the Financial Fund for Housing, and the use of the HG loan resources.

RESOURCE PROJECTIONS FOR FFH MECHANISM



- A** Approximate value of shelter solutions financed through the FFH mechanism.
- B** Accumulated FFH discounts.
- C** HG-funded portion of FFH discounts. (Phases One + Two : US\$ 40 million)
- D** HG-funded portion of FFH discounts from Phase One (US\$ 30 million).
- E** HG-funded portion of FFH discounts from Phase Two (US\$ 10 million).

PROJECTED DISCOUNTS FROM THE FFH AND PORTION JUSTIFYING HG-007 DISBURSEMENTS (Phase I./ \$ 30 million)

Totales >	14,778,748	4,621,252	19,400,000		38,800,000			
DATE	PRIVATE SECTOR FFH DISCOUNTS (Sucres x1000)	JNV/BEV FFH DISCOUNTS (Sucres x1000)	TOTAL DISCOUNTS (Sucres x1000)	EXCH RATE	FFH DISCOUNTS (US\$)	HG PORTION DISCOUNTS (US\$)	HG PORTION ACCUMLATED (US\$)	ESTIMATED VALUE OF SHELTER (Accum.) (US\$)
09/89	230,670		230,670	500	461,340	346,005	900,000	1,566,000
	185,850		185,850	500	371,700	278,775	1,246,005	2,170,355
	312,283		312,283	500	624,566	468,425	1,524,780	2,657,282
	286,192		286,192	500	572,384	429,288	1,993,205	3,475,464
01/89	343,202	90,000	433,202	500	866,404	649,803	2,422,493	4,225,287
	424,487	93,600	518,087	500	1,036,174	777,131	3,072,296	5,360,276
	330,695	97,344	428,029	500	856,058	642,044	3,849,426	6,717,664
04/89	303,214	101,238	404,452	500	808,904	606,678	4,491,470	7,839,100
	337,928	105,287	443,215	500	886,431	664,823	5,098,147	8,898,764
	375,223	109,499	484,722	500	969,444	727,083	5,762,970	10,059,988
07/89	363,983	113,879	477,862	500	955,723	716,793	6,490,053	11,329,959
	488,540	118,434	606,974	500	1,213,948	910,461	7,206,845	12,581,956
	420,000	123,171	543,171	500	1,086,342	814,757	8,117,306	14,172,228
10/89	424,200	128,098	552,298	500	1,104,596	828,447	8,932,063	15,595,336
	428,442	131,941	560,383	500	1,120,766	840,575	9,760,510	17,042,357
	432,726	135,899	568,626	500	1,137,251	852,938	10,601,084	18,510,561
01/90	437,054	139,976	577,030	500	1,154,060	865,545	11,454,023	20,000,360
	441,424	144,175	585,600	500	1,171,199	878,400	12,319,568	21,512,178
	445,838	148,501	594,339	500	1,188,678	891,509	13,197,967	23,046,450
04/90	450,297	152,956	603,253	500	1,206,505	904,879	14,089,476	24,603,618
	459,303	157,544	616,847	500	1,233,694	925,271	14,994,355	26,184,140
	468,489	162,271	630,760	500	1,261,519	946,130	15,919,626	27,800,280
07/90	477,859	167,139	644,998	500	1,289,995	967,496	16,865,765	29,452,870
	487,416	172,153	659,569	500	1,319,138	989,353	17,833,262	31,142,764
	492,290	175,596	667,886	500	1,335,772	1,001,829	18,822,615	32,870,834
10/90	497,213	179,108	676,321	500	1,352,642	1,014,481	19,824,444	34,620,696
	502,185	182,690	684,875	500	1,369,750	1,027,317	20,838,926	36,392,657
	507,207	186,344	693,551	500	1,387,102	1,040,326	21,866,238	38,187,030
01/91	512,279	186,344	698,623	500	1,397,246	1,047,934	22,906,565	40,004,133
	517,402	186,344	703,746	500	1,407,491	1,055,619	23,954,499	41,834,525
	522,576	186,344	708,920	500	1,417,839	1,063,380	25,010,118	43,678,339
04/91	527,801	186,344	714,145	500	1,428,291	1,071,218	26,073,497	45,535,709
	533,079	186,344	719,424	500	1,438,647	1,079,135	27,144,716	47,406,770
	538,410	186,344	724,754	500	1,449,509	1,087,131	28,223,851	49,291,659
07/91	273,001	186,344	459,345	500	918,690	689,018	29,310,982	51,190,516
							30,000,000	52,394,000

77

PROJECTED DISCOUNTS FROM THE FFH AND PORTION JUSTIFYING HS-007 DISBURSEMENTS (Phase II./ \$ 10 million)

Totales >	2,818,125	2,181,874	5,000,000		9,952,999				
DATE	FFH DISCOUNTS FOR WATER (Sucre x1000)	FFH DISCOUNTS FOR SEWER (Sucre x1000)	TOTAL FFH DISCOUNTS (Sucre x1000)	EXCH RATE	FFH DISCOUNTS (US\$)	HS PORTION DISCOUNTS (US\$)	HS PORTION ACCUMULATED (US\$)	ESTIMATED VALUE OF INCREASE (US\$)	
08/88				0 500	0	0	0	0	0
				0 500	0	0	0	0	0
				0 500	0	0	0	0	0
				0 500	0	0	0	0	0
01/89				0 500	0	0	0	0	0
				0 500	0	0	0	0	0
				0 500	0	0	0	0	0
04/89				0 500	0	0	0	0	0
				0 500	0	0	0	0	0
				0 500	0	0	0	0	0
07/89	149,175	0	149,175	500	298,350	298,350	298,350	358,020	
	196,313	77,175	273,488	500	546,975	546,975	845,325	1,014,390	
	209,363	77,175	286,538	500	573,075	573,075	1,419,400	1,702,080	
10/89	209,363	169,875	379,238	500	758,475	758,475	2,177,875	2,812,250	
	209,363	169,875	379,238	500	758,475	758,475	2,936,350	3,522,420	
	209,363	169,875	379,238	500	758,475	758,475	3,694,825	4,432,590	
01/90	209,363	169,875	379,238	500	758,475	758,475	4,453,300	5,242,760	
	209,363	92,700	302,063	500	604,125	604,125	5,057,425	6,067,930	
	209,363	92,700	302,063	500	604,125	604,125	5,661,550	6,762,100	
04/90	209,363	92,700	302,063	500	604,125	604,125	6,265,675	7,517,270	
	209,363	92,700	302,063	500	604,125	604,125	6,869,800	8,242,440	
	60,189	92,700	152,888	500	305,775	305,775	7,174,575	8,609,420	
07/90	47,139	92,700	139,838	500	279,675	279,675	7,454,250	8,943,150	
	47,138	88,065	135,203	500	270,405	270,405	7,724,655	9,269,520	
	45,723	83,662	129,385	500	258,770	258,770	7,983,425	9,581,110	
10/90	44,352	79,479	123,830	500	247,661	247,661	8,231,086	9,830,300	
	43,021	75,505	118,526	500	237,052	237,052	8,468,138	10,161,765	
	41,730	71,729	113,459	500	226,920	226,920	8,695,058	10,474,045	
01/91	40,479	68,143	108,622	500	217,243	217,243	8,912,301	10,754,761	
	39,254	64,736	104,000	500	208,000	208,000	9,120,301	10,991,241	
	38,086	61,499	99,585	500	199,171	199,171	9,319,170	11,150,366	
04/91	36,944	58,424	95,369	500	190,736	190,736	9,509,906	11,312,240	
	35,835	55,503	91,338	500	182,677	182,677	9,692,583	11,451,161	
	34,760	52,728	87,488	500	174,976	174,976	9,867,559	11,581,470	
07/91	33,718	32,352	66,070	500	132,139	132,139	9,999,698	11,709,699	

78

ANNEX 5

Relevant correspondence of institutions participating in
the Financial Fund for Housing Program:

79



Banco de Desarrollo del Ecuador S.A.

Pág. 2.

intermediación del BEDE ante el Banco Central para la utilización de los Fondos Financieros para la Vivienda de AID para varios proyectos en barrios marginales que alcanzarían hasta 10 millones de dólares, incluyendo 8.5 millones de dólares para agua potable y 1.5 millones para alcantarillado, por lo que los prestatarios de los fondos serían las Empresas Municipales de Agua Potable y Alcantarillado con la garantía del I. Municipio de Quito.

Al respecto, mediante el presente, deseo manifestar a usted que, habiendo sido aceptada la intermediación financiera del BEDE por parte del Banco Central como se deja indicado, este Banco está dispuesto a servir de intermediario financiero para la utilización de los Fondos Financieros para la Vivienda, que mantiene la AID en el Banco Central, para la ejecución de los proyectos de agua potable y alcantarillado - en barrios marginales de la ciudad de Quito, porque constituyen la infraestructura indispensable para la vivienda y porque son proyectos prioritarios para el financiamiento por parte del BEDE. Esta intermediación podría eventualmente ampliarse en favor de proyectos de otros municipios interesados.

De usted atentamente,

Econ. Eduardo Valencia Vásquez,
GERENTE GENERAL.



EMPRESA MUNICIPAL DE ALCANTARILLADO

OFICIO No. 0915-E

Calle García Moreno No. 887
QUITO - ECUADOR

QUITO, A 6 DE Septiembre DE 1988

ASUNTO:

Señores
AGENCIA INTERNACIONAL DE DESARROLLO (A.I.D.)
Presente.-

Estimados Señores:

El grupo de obras de canalización a realizarse en los diferentes barrios de Quito y que han sido puestas a consideración de ustedes para una posible línea de crédito, tiene objetivos precisos propios de su carácter social y técnico como son: -- prevención de enfermedades, mejorar las condiciones higiénicas, propender el desarrollo socio económico y cultural de la población. Las redes estarán instaladas en los ejes de las calles, sin causar ningún perjuicio a sus habitantes y más bien facilitar las conexiones domiciliarias. Todo lo cual nos permite -- afirmar que las obras no cambiarán ni alterarán la ecología de la zona.

Atentamente,

Ing. Julia Alvarez T.
GERENTE DIRECTOR TECNICO

JPN/mev.



SET. 6 1993 N° 1678

QUITO, A.....DE.....DE 198.....

I. MUNICIPALIDAD DE QUITO
ALCALDIA

El Ecuador ha sido, es
y será País Amazónico.

ASUNTO:

Sr. Lcdo.
José Morillo Battle
GERENTE GENERAL
BANCO CENTRAL DEL ECUADOR
Presente.-

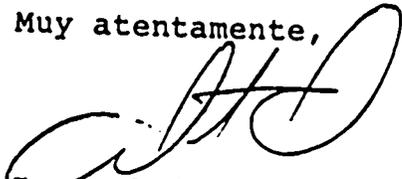
De mis consideraciones:

Me es grato remitir, anexo a la presente, una copia de la comunicación No.1679 de septiembre 6 del presente año, dirigida al señor Gerente General del BEDE, exponiendo una posible operación entre las Empresas Municipales de Agua Potable y Alcantarillado y el BEDE, éste último en calidad de intermediario de Fondos Financieros para la Vivienda.

La intención de esta I. Municipalidad y de AID sería - la posibilidad de usar fondos hasta por US \$10 millones a ser destinados a obras de agua potable y alcantarillado en barrios marginales de la ciudad de Quito. Los recursos a ser ocupados serían adicionales a los que actualmente cuenta el Banco Central con cargo a Fondos Financieros para la Vivienda.

Por la atención que se digne conceder a la presente, - lo saludo y suscribo,

Muy atentamente,


Ing. Alejandro Pinto
ALCALDE ENCARGADO DE SAN FRANCISCO DE QUITO

c.c. Lindsay Elmendorf, AID

Dr. Ramiro Viteri G., Asesor en Relaciones Internacionales.

83



SEI. 6 1988

QUITO, A.....DE.....DE 198.....

I. MUNICIPALIDAD DE QUITO
ALCALDIA

El Ecuador ha sido, es
y será País Amazónico.

ASUNTO:

Sr. Econ.
Eduardo Valencia
GERENTE GENERAL
BANCO DE DESARROLLO DEL ECUADOR
Presente.-

Señor Gerente General:

La presente tiene por objeto dar a conocer a usted que, concretando la sugerencia formulada por esta I. Municipalidad mediante comunicación No.484 de Junio 6 pasado, y que fuera objeto de aceptación por parte del BEDE expresada en comunicación No.88-160-GFI-5225 de Agosto 1º del año que decurre; en los próximos días se presentará a su digna consideración y por su intermedio a la del Banco Central del Ecuador, una propuesta de financiamiento para obras de alcantarillado y agua potable en barrios marginales de la ciudad de Quito.

La propuesta, con sus respectivos estudios y planes de financiamiento, se ajustará a los siguientes parámetros:

- 1.- Origen de los recursos: Fondos Financieros para la Vivienda, recursos AID que se administran por parte del Banco Central del Ecuador.
- 2.- Entidad financiera intermediaria: Banco de Desarrollo del Ecuador. Existe aceptación del BEDE; resta por confirmarse la aceptación del Banco Central del Ecuador.
- 3.- Monto de los recursos a utilizarse: US \$.10 millones: US \$.1.5 millones para Alcantarillado y US \$.8.5 millones para Agua Potable.
- 4.- Forma de utilización de los recursos: líneas de crédito.
- 5.- Prestatarios: Empresas Municipales de Agua Potable y Alcantarillado, con la garantía del I. Municipio de Quito.

./././.

84



SET. 6 1988)

QUITO, A.....DE.....DE 198.....

I. MUNICIPALIDAD DE QUITO
ALCALDIA

El Ecuador ha sido, es
y será País Amazónico.

ASUNTO

Pág. II

6.- Características del financiamiento: plazo, tasa de interés, comisiones, a determinarse.

Con estos antecedentes y, una vez que contemos con la aceptación del Banco Central del Ecuador en el sentido de que el BEDE constituye intermediario financiero elegible para el uso de recursos con cargo a los Fondos Financieros para la Vivienda, concretaremos ante el BEDE la operación antes referida.

Cabe señalar que, el uso de recursos del modo antes - indicado, no significará que esta I. Municipalidad y sus Empresas estarán usando fondos propios que puede comprometer el BEDE hacia esta Entidad Edilicia; sino recursos que el BEDE tan solo los intermediaría sin - afectar por tanto futuras operaciones que puedan concertarse con el BEDE.

Por otra parte, el posible uso de US \$.10 millones en las operaciones referidas no afectará el uso alternativo que el Banco Central pueda otorgar a los recursos AID que administra a través del mecanismo de Fondos Financieros para la Vivienda, pues el señalado - organismo internacional obtendría para el efecto una disposición adicional de fondos.

Por la atención que se digna otorgar a la presente, - le agradezco y, suscribo,

Muy atentamente,

Ing. Alejandro Pinto
ALCALDE ENCARGADO DE SAN FRANCISCO DE QUITO

c.c. Lcdo. Jaime Morillo B., Gerente General Banco - Central del Ecuador.

Sr. Lindsay Elmendorf, AID.

Dr. Ramiro Viteri G., Asesor en Relaciones Internacionales.

Gerente Empresa Agua Potable

Gerente Empresa Alcantarillado



I. MUNICIPALIDAD DE QUITO
ALCALDIA

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ASUNTO:

Sr. Lcdo.
José Morillo Battle
GERENTE GENERAL
BANCO CENTRAL DEL ECUADOR
Presente.-

De mis consideraciones:

Me es grato remitir, anexo a la presente, una copia de la comunicación No. 1679 de septiembre 6 del presente año, dirigida al señor Gerente General del BEDE, exponiendo una posible operación entre las Empresas Municipales de Agua Potable y Alcantarillado y el BEDE, éste último en calidad de intermediario de Fondos Financieros para la Vivienda.

La intención de esta I. Municipalidad y de AID sería - la posibilidad de usar fondos hasta por US \$1.10 millones a ser destinados a obras de agua potable y alcantarillado en barrios marginales de la ciudad de Quito. Los recursos a ser ocupados serían adicionales a los que actualmente cuenta el Banco Central con cargo a Fondos Financieros para la Vivienda.

Por la atención que se digna conceder a la presente, - lo saludo y suscribo,

Muy atentamente,

Ing. Alejandro Pinto
ALCALDE ENCARGADO DE SAN FRANCISCO DE QUITO

c.c. Lindsay Elmenorff, AID

Dr. Ramiro Viteri G., Asesor en Relaciones Internacionales.



SET. 6 1988

QUITO, A.....DE.....DE 198.....

**I. MUNICIPALIDAD DE QUITO
ALCALDIA**

El Ecuador ha sido, es
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ASUNTO

Sr. Econ.
Eduardo Valencia
GERENTE GENERAL
BANCO DE DESARROLLO DEL ECUADOR
Presente.-

Señor Gerente General:

La presente tiene por objeto dar a conocer a usted que, concretando la sugerencia formulada por esta I. Municipalidad mediante comunicación No.484 de Junio 6 pasado, y que fuera objeto de aceptación por parte del BEDE expresada en comunicación No.88-160-GFI-5225 de Agosto 1º del año que decurre; en los próximos días se presentará a su digna consideración y por su intermedio a la del Banco Central del Ecuador, una propuesta de financiamiento para obras de alcantarillado y agua potable en barrios marginales de la ciudad de Quito.

La propuesta, con sus respectivos estudios y planes de financiamiento, se ajustará a los siguientes parámetros:

- 1.- Origen de los recursos: Fondos Financieros para la Vivienda, recursos AID que se administran por parte del Banco Central del Ecuador.
- 2.- Entidad financiera intermediaria: Banco de Desarrollo del Ecuador. Existe aceptación del BEDE; resta por confirmarse la aceptación del Banco Central del Ecuador.
- 3.- Monto de los recursos a utilizarse: US \$.10 millones: US \$.1.5 millones para Alcantarillado y US \$.8.5 millones para Agua Potable.
- 4.- Forma de utilización de los recursos: líneas de crédito.
- 5.- Prestatarios: Empresas Municipales de Agua Potable y Alcantarillado, con la garantía del I. Municipio de Quito.

./././.

87



SET. 6 1988

QUITO, A.....DE.....DE 198.....

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ASUNTO

Pág. II

6.- Características del financiamiento: plazo, tasa de interés, comisiones, a determinarse.

Con estos antecedentes y, una vez que contemos con la aceptación del Banco Central del Ecuador en el sentido de que el BEDE constituye intermediario financiero elegible para el uso de recursos con cargo a los Fondos Financieros para la Vivienda, concretaremos ante el BEDE la operación antes referida.

Cabe señalar que, el uso de recursos del modo antes indicado, no significará que esta I. Municipalidad y sus Empresas estarán usando fondos propios que puede comprometer el BEDE hacia esta Entidad Edilicia; sino recursos que el BEDE tan solo los intermediaría sin afectar por tanto futuras operaciones que puedan concertarse con el BEDE.

Por otra parte, el posible uso de US \$.10 millones en las operaciones referidas no afectará el uso alternativo que el Banco Central pueda otorgar a los recursos AID que administra a través del mecanismo de Fondos Financieros para la Vivienda, pues el señalado organismo internacional obtendría para el efecto una disposición adicional de fondos.

Por la atención que se digne otorgar a la presente, - le agradezco y, suscribo,

Muy atentamente,

Ing. Alejandro Pinto
ALCALDE ENCARGADO DE SAN FRANCISCO DE QUITO

c.c. Lcdo. Jaime Morillo B., Gerente General Banco - Central del Ecuador.

Sr. Lindsay Elmendorf, AID.

Dr. Ramiro Viteri G., Asesor en Relaciones Internacionales.

Gerente Empresa Agua Potable

Gerente Empresa Alcantarillado

ANNEX 6

Schedule of activities planned by EMAP-Q and EMA for provision of basic infrastructure to informal neighborhoods. This information is summarized in tables 6 and 7 in the text of this document.

ANNEX 6

EEWAP

ACTIVITIES SCHEDULE FOR IMPLEMENTING WATER SYSTEM PROJECTS
FOR PERIPHERAL SETTLEMENTS-QUITO, ECUADOR.

ACTIVITIES COSTS	1988								1989								1990								TOTALS	PERCENT												
	1	2	3	SEP	OCT	NOV	DIC	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AGO	SEP	OCT	NOV	DIC	JAN	FEB	MARCH	APRIL	MAY			JUNE	JULY	AGO	SEP	OCT							
RESUMEN: Costos Ejecucion:	MILLONES DE DOLARES																																TOTALS	PERCENT				
PACKAGE 1.-LOMAS PUENZASI	1621.2	16.8	16.5	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	111.3	128.1	136.2	141.6	142.9	158.5	147.4	143.0	192.9	178.3	112.7	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1621.2	68.82	
PACKAGE 2.-SUR ORIENTAL	435.1	1.6	4.2	9.3	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.5	37.8	45.1	67.6	71.2	42.3	42.8	37.6	38.1	33.1	36.4	29.9	30.4	26.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	435.1	25.71		
PACKAGE 3.-LA FORESTAL	126.6	0.0	0.0	3.2	2.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	12.5	16.5	15.8	16.3	17.0	13.0	10.1	9.7	3.7	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	126.6	5.23		
TOTALS PARCIALES 1+2+3	2334.9	18.4	21.1	19.8	6.4	1.4	0.0	0.0	0.0	0.0	0.0	111.3	156.6	179.5	219.2	227.0	225.5	265.0	265.6	242.5	226.5	125.5	41.8	36.1	36.4	26.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2334.9	100.00			
COSTOS TOTALES ACUMULADOS	2334.9	18.4	39.4	59.3	67.7	69.1	69.1	69.1	69.1	69.1	69.1	180.4	339.0	518.5	737.7	964.7	1190.2	1396.2	1595.8	1842.3	2045.8	2225.3	2267.1	2297.2	2327.6	2334.4	2334.9	2334.9	2334.9	2334.9	2334.9	2334.9	2334.9	2334.9	100.00			
IMPORTE FAMILIAR 10 I	225.5	18.0	24.1	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9	6.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	225.5	10.00		
IMPORTE FAMILIAR 10 II	2119.4																																			2119.4	90.00	
DESCUENTO DEL FTV	2119.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2119.4	90.00		
RESUMEN: FVTS	US THOUSANDS																																TOTALS	PERCENT				
PACKAGE 1.-LOMAS PUENZASI	374.4	32.6	32.0	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	222.6	256.2	272.4	223.2	285.8	277.0	294.8	766.8	385.8	226.6	225.4	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	374.4	68.82
PACKAGE 2.-SUR ORIENTAL	1210.2	3.2	9.2	19.6	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	75.6	136.2	135.2	142.4	69.6	85.6	75.2	76.2	66.2	69.6	59.8	65.8	53.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1210.2	25.71		
PACKAGE 3.-LA FORESTAL	257.1	0.0	0.0	6.4	5.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	25.0	33.0	31.6	32.6	35.6	26.0	26.2	19.4	7.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	257.1	5.23	
TOTALS 1+2+3	4709.7	36.8	42.2	39.6	16.8	2.8	0.0	0.0	0.0	0.0	0.0	222.6	331.2	339.0	438.4	454.0	451.0	412.0	467.2	487.0	425.0	311.0	83.6	60.1	60.8	35.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	4709.7	100.00			
CUMULATIVE EXEC.COSTS	4709.7	36.8	79.0	118.6	135.4	136.2	136.2	136.2	136.2	136.2	136.2	358.8	672.0	1011.0	1475.4	1929.4	2380.4	2782.4	3199.6	3686.6	4139.6	4436.6	4534.2	4594.3	4655.1	4709.7	4709.7	4709.7	4709.7	4709.7	4709.7	4709.7	4709.7	4709.7	100.00			
CONTR. PAYMENT 10 I	471.0	36.0	45.1	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	12.1	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	471.0	10.00		
FINANCIAL ASSETS 10 I	14258.7																																			14258.7	90.00	
DESCUENTO FROM FTV	14258.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14258.7	90.00		

ACTIVITIES SCHEDULE FOR IMPLEMENTING SEWER SYSTEM PROJECTS
FOR PERIPHERAL SETTLEMENTS-BOITL, ECUADOR.

ACTIVITIES	1988												1989												1990												TOTALS	PERCENT
	1	2	3	SEP	OCT	NOV	DIC	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AGO	SEP	OCT	NOV	DIC	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AGO	SEP	OCT									
PARAMETE 1.-																																						
ESTUDIOS	6.3	2.1	2.1	2.1																																		
APROBACION DESE																																						
ORDEN ANTICIPADO 20% BENEF.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0																													
CONTRATACION DESE																																						
SOLICITACION																																						
CONTRATACION																																						
EJECUCION	210.0																																					
CONTRAT/BENEFICIARIOS																																						
RESERVA FV (80%)																																						
RECUPERACION																																						
SUBTOTAL 1	216.3	2.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.2	37.0	42.0	42.0	37.0	25.2											216.3	100.0%									
PARAMETE 2.-																																						
ESTUDIOS	8.7	2.2	2.2	2.2	2.2																																	
APROBACION DESE																																						
ORDEN ANTICIPADO 20% BENEF.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0																												
CONTRATACION DESE																																						
SOLICITACION																																						
CONTRATACION																																						
EJECUCION	209.6																																					
CONTRAT/BENEFICIARIOS																																						
RESERVA FV (80%)																																						
RECUPERACION																																						
SUBTOTAL 2	218.3	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	34.8	52.1	57.9	57.9	52.1	34.8											218.3	100.0%									
PARAMETE 3 Y 4																																						
ESTUDIOS	30.0																																					
APROBACION DESE																																						
ORDEN ANTICIPADO 20% BENEF.	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4																														
CONTRATACION DESE																																						
SOLICITACION																																						
CONTRATACION																																						
EJECUCION	1000.0																																					
CONTRAT/BENEFICIARIOS																																						
RESERVA FV (80%)																																						
RECUPERACION																																						
SUBTOTAL 3	1030.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	80.0	100.0	120.0	150.0	150.0	120.0	100.0	80.0	50.0											1030.0	100.0%			

111

ANNEX 7

Worksheet to determine affordability proposed project activities for beneficiary families. This form is a print-out of a simple computer program which facilitates assessment of the affordability of proposed improvement programs under different assumptions of cost, sharing, and other variables.

enap1.wk7

ANALYSIS OF PROGRAM'S BASIC FINANCIAL FEASIBILITY (PROJECT LEVEL)

Water system installation cost per beneficiary family	S/	110,000		A
Portion of installation cost paid with beneficiary's savings (downpat.)		10.00	Z	B
Amount of Beneficiary's downpayment to EMAP	S/	11,000		C=A*B
Water system installation cost to be financed by loan from BEDE to EMAP	S/	99,000		D=A-C
Portion of BEDE financing to be recovered from EMAP loan to beneficiary		100.00	Z	E
Amount of EMAP loan to beneficiary	S/	99,000		F=D*E
Amount of BEDE loan to be recovered through EMAP tariff increases	S/	0		G=D-F
Characteristics of EMAP loan to beneficiary:				
Term		10	years	
Annual interest rate		21.0	Z	
Payment escalation rate		9.0	Z per yr.	
Loan to payment factor		65.90025		H
Monthly payment (year 1)	S/	1,502		I=F/H
Estimated EMAP piped water consumption rate of beneficiary		40.00	M3/month	J
Cost of EMAP piped water	S/	21.00	per M3	K
Estimated cost of beneficiary's EMAP piped water consumption	S/	840		L=J*K
Total monthly payments of beneficiary (EMAP loan + consumption)	S/	2,342		M=I+L
Current water consumption rate of beneficiary		4.50	M3/month	N
Cost of current water supply of beneficiary	S/	750	per M3	O
Current cost of beneficiary's monthly water consumption	S/	3,375		P=N*O
Immediate monthly savings to beneficiary as result of Program service	S/	1,033		Q=P-H
Total number of lots to be served by the Program		21,408		R
Total Program financing to be recovered through EMAP tariff increases	S/	0		S=G+R
Characteristics of loan provided to EMAP by BEDE:				
Term		10	years	
Annual interest rate		20.00	Z	
Payment escalation rate		9.00	Z per yr.	
Loan to payment factor		68.59789		T
Monthly income required to pay "tariffs" portion of BEDE/EMAP loan	S/	0		U=S/T
Total monthly sales of water by EMAP (including EMAP/FFH Program)		4,004,480	M3	V
Current average price of EMAP water supply to consumers	S/	25.00	per M3	W
Increase in tariffs required to cover EMAP portion of Program financing	S/	0.00	per M3	X=S/W

93

ANALYSIS OF PROGRAM'S BASIC FINANCIAL FEASIBILITY (PROJECT LEVEL)

Water system installation cost per beneficiary family	S/	110,000		A
Portion of installation cost paid with beneficiary's savings (downpmt.)		10.00	X	B
Amount of Beneficiary's downpayment to EMAP	S/	11,000		C=A+B
Water system installation cost to be financed by loan from BEDE to EMAP	S/	99,000		D=A-C
Portion of BEDE financing to be recovered from EMAP loan to beneficiary		50.00	X	E
Amount of EMAP loan to beneficiary	S/	49,500		F=D+E
Amount of BEDE loan to be recovered through EMAP tariff increases	S/	49,500		G=D-F
Characteristics of EMAP loan to beneficiary:				
Term		10	years	
Annual interest rate		21.0	%	
Payment escalation rate		9.0	% per yr.	
Loan to payment factor		65.90025		H
Monthly payment (year 1)	S/	751		I=F/H
Estimated EMAP piped water consumption rate of beneficiary		40.00	M ³ /month	J
Cost of EMAP piped water	S/	21.00	per M ³	K
Estimated cost of beneficiary's EMAP piped water consumption	S/	840		L=J*K
Total monthly payments of beneficiary (EMAP loan + consumption)	S/	1,591		M=L+I
Current water consumption rate of beneficiary		4.50	M ³ /month	N
Cost of current water supply of beneficiary	S/	750	per M ³	O
Current cost of beneficiary's monthly water consumption	S/	3,375		P=N*O
Immediate monthly savings to beneficiary as result of Program service	S/	1,784		Q=P-N
Total number of lots to be served by the Program		21,408		R
Total Program financing to be recovered through EMAP tariff increases	S/	1,059,696,000		S=G*R
Characteristics of loan provided to EMAP by BEDE:				
Term		10	years	
Annual interest rate		20.00	%	
Payment escalation rate		9.00	% per yr.	
Loan to payment factor		68.59789		T
Monthly income required to pay "tariffs" portion of BEDE/EMAP loan	S/	15,447,939		U=S/T
Total monthly sales of water by EMAP (including EMAP/FFH Program)		4,404,480	M ³	V
Current average price of EMAP water supply to consumers	S/	25.00	per M ³	W
Increase in tariffs required to cover EMAP portion of Program financing	S/	3.51	per M ³	X=S/V

94

ANNEX 8

REQUEST FOR CATEGORICAL EXCLUSION

95

ANNEX 8

ENVIRONMENTAL THRESHOLD DECISION

Project Location : Ecuador
Project Title and Number : National Shelter Delivery System Program,
518-HG-007
Funding: : \$40,000,000 (L), \$1,000,000 (G)
Life of Project : 7 years
Request Prepared by : Jane Stanley, USAID/Ecuador
Recommended Threshold Decision : Categorical Exclusion
Bureau Threshold Decision: :

Signed: Frank Almaguer
Frank Almaguer
Mission Director

Date : SEP. 13 1988

Approved: _____
James S. Hester
Chief Environmental Officer
Bureau for Latin America
and the Caribbean

Date : _____

NATIONAL SHELTER DELIVERY SYSTEM PROGRAM

518-HG-007

A. Description of Program

The National Shelter Delivery System Program was designed to increase the supply of low-income housing and other shelter services by assisting the GOE to implement the shelter component of its National Development Program. This program was initiated in 1984 and the first \$30 million in Housing Guaranty (HG) authority provided under this program was targeted at providing low cost housing and home improvement loans to low income families. This \$10 million amendment to the HG authority will guaranty the financing of other shelter services, in particular, water and sewerage services.

Under this amendment, various municipalities within Ecuador will design water and sewerage projects and submit them to the Ecuadorian Development Bank (BEDE) for approval. Before BEDE approves a project, it conducts an assessment of project feasibility that includes an analysis of the project's environmental impacts. Once BEDE approves a project for financing, it requests loan funds from the Central Bank's Financial Fund for Housing (FFH). The FFH's loan funds are comprised of GOE budgetary resources and loans provided by U.S. investors that are backed by the U.S. Treasury under the HG authority for this program.

CBE will recover loan funds from BEDE. BEDE will recuperate funds from municipalities, who will in turn recover costs from beneficiaries. The Mission's role in the program will be that of monitoring overall program progress. The Mission will not be involved in the design or the approval of individual projects.

B. Potential Environmental Impacts/Plans for Mitigation

While the Mission will not be involved in the details of project design, it is aware that water and sewerage projects do have a potential for creating significant positive and negative environmental impacts. Of major concern in the implementation of this program are:

- The need to assure that all projects involving expansions of water supply distribution systems take into account the adequacy of sewage disposal systems in the project area and ensure that necessary improvements to the sewage disposal system are completed concurrently with the new water distribution system.
- The scarcity of water in both Quito and Guayaquil. While both cities are undertaking large projects to expand their source of supply, assurances must be made that there is adequate water for system expansion. One way to avoid this problem is to schedule construction in neighborhoods that already have separate sources of water supply, such as nearby springs, earlier in the program as is proposed in Quito. (In this case we would need to confirm that the water is potable).

97

- The capacity of municipal sewerage collection system to handle the additional volume of wastes.

Because the Mission is concerned about the potential environmental impacts of projects to be financed under this program, it will make a thorough review of BEDE's loan approval procedures to ensure that its environmental assessment procedures are adequate. If the Mission determines that BEDE's procedures are inadequate, it will provide BEDE with assistance to set up and implement improved environmental assessment criteria and procedures. The Mission will assess BEDE's procedures prior to amending the Implementation Agreement for this additional \$10 million in HG authority.

C. Justification for Categorical Exclusion

Section 216.2 (c) (ii) of AID's Environmental Regulations states that Initial Environmental Examinations, Environmental Assessments and Environmental Impact Statements are not required when "AID does not have knowledge of or control over, and the objective of AID in furnishing assistance does not require, either prior to approval of financing or prior to implementation of specific activities, knowledge of or control over, the details of the specific activities that have an effect on the physical and natural environment for which financing is provided by AID". The HG-007 program falls within this category because under this program AID does not approve separate subprojects prior to financing and has no knowledge of control over the details of the specific subprojects it is financing.

CLEARANCE: RLA:ANewton

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98