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PROJECT PAPER

IVORY COAST 681-HG-003

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Glossary of Acronyms for Ivory Coast Agencies

ARSO	South West Regional Development Authority
BCEAO	(Banque Centrale des Etats d'Afrique de l'Ouest) Central Bank of West Africa
BNEC	(Banque Nationale pour l'Epargne et le Credit) National Savings and Loan Bank
BNETD	National Bureau for Technical Development Studies
BSIE	(Budget Special d'Investissement Economique) Investment Budget
CAA	(Caisse Autonome d'Amortissement) Fund to manage public debt
CCE	French aid fiduciary
CCI	(Credit de la Cote d'Ivoire)
ECCI	National Electric Co.
FNA	National Sewage FUND
GOIC	Government of the Ivory Coast
LEM	(Lotissement d'Equipement Minimum) Sites and Services
MCU	Ministry of Construction and Town Planning
OSHE	(Office pour le Soutien de l'Habitat Economique) Office of Economic Housing
SETU	(Societe d'Equipement de Terrains Urbains) Land Development Company
SICOGI	(Societe Ivoirienne de Construction et de Gestion Immobiliere) The Ivorian Housing Construction and Management Company
SCDECI	National Water Co.
SOGEFIHA	Societe de Gestion Financiere de l'Habitat, administrator of first HG loan and Borrower of second

Exchange Rate: US \$ 1 = CFAF 225

AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT PAPER FACESHEET TO BE COMPLETED BY ORIGINATING OFFICE		1. TRANSACTION CODE <small>(Mark appropriate box)</small> <input type="checkbox"/> Original <input type="checkbox"/> Change <input type="checkbox"/> Add <input type="checkbox"/> Delete	PP DOCUMENT CODE 3
2. COUNTRY/ENTITY Government of the Ivory Coast		3. DOCUMENT REVISION NUMBER	
4. PROJECT NUMBER 681-IG-003	5. BUREAU a. Symbol AFR b. Code 1	6. ESTIMATED FY OF PROJECT COMPLETION FY 77	
7. PROJECT TITLE - SHORT (stay within brackets) [Ivory Coast Low-Income Urban Shelter Program]		8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION a. INITIAL ^{mo. yr.} 05 76 b. FINAL FY 77	

9. ESTIMATED TOTAL COST (\$000 or equivalent, \$1 = 63,300)

a. FUNDING SOURCE	FIRST YEAR FY			ALL YEARS		
	b. FX	c. L/C	d. Total	e. FX	f. L/C	g. Total
AID APPROPRIATED TOTAL						
(Grant)						
(Loan)						
Other						
1. IG			10,500			21,000
U.S.						
HOST GOVERNMENT			8,000			20,300
OTHER DONORS (IBRD)			5,000			22,000
TOTALS			26,500			63,300

10. ESTIMATED COSTS/AID APPROPRIATED FUNDS (\$000)

a. Approp- riation (Alpha Code)	b. Primary Purpose Code	c. Primary Tech. Code	FY		FY		FY		ALL YEARS	
			d. Grant	e. Loan	f. Grant	g. Loan	h. Grant	i. Loan	j. Grant	k. Loan
NON-APPROPRIATED FUNDS										
TOTALS										

11. ESTIMATED EXPENDITURES

12. PROJECT PURPOSE(S) (stay within brackets) Check if different from PID/PRP

Establish a coordinated Ivorian operation to design, implement and manage replicable shelter projects for lower-income families

13. WERE CHANGES MADE IN BLOCKS 12, 13, 14, or 15 OF THE PID FACESHEET? IF YES, ATTACH CHANGED PID FACESHEET

Yes No

14. ORIGINATING OFFICE CLEARANCE Signature: <i>C. Richard Zenger</i> Title: Assistant Director for Operations SER/II		15. Date Forward in AID W. or L.A. AID/W Documents, Date of Distribution Date Signed: mo. day yr. 0 6 14 76
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AID 1330-4 (1-75)

B. Recommendations

On the basis of the findings set forth in this Project Paper, approval for the following is recommended:

- 1) Housing Guaranty to be authorized in FY 76 \$ 10,500,000
- 2) Housing Guaranty to be authorized in FY 77 \$ 10,500,000

for participation in a low-income shelter project to be financed by AID, the International Bank for Reconstruction and Development (IBRD) and the Government of the Ivory Coast (GOIC).

C. Description of the Project

The proposed project will involve a total cost of \$63.3 million to be financed by AID, IBRD and GOIC. Its purpose is to establish and strengthen a coordinated GOIC operation to design and implement a comprehensive range of replicable shelter projects suitable for low-income families.

In connection with this GOIC will institute overall financial planning for the shelter sector, where its previous efforts directed at the needs of low-income families, in the absence of adequate planning and realistic standards, have become an increasing drain on its resources. GOIC will also strengthen MCU, the Ministry of Construction, to obtain greater coordination and effectiveness in overall project direction. This will include the following:

- 1) GOIC will complete transformation of the newly organized National Savings and Credit Bank (BNEC) into a central fiduciary for the shelter sector, responsible for financial planning and management of public or GOIC-guaranteed funds in the sector.

- 2) A special project supervision, monitoring and evaluation unit will be set up in MCU.

Loan-financed technical assistance totaling 168 man months will be provided BNEC and MCU for these responsibilities.

The project also will involve three programs offering improved shelter, including sanitary facilities and access to community services to about 130,000 low-income persons, as follows:

- 3) About 272 hectares of slums containing \pm 4,000 parcels housing 100,000 persons will be upgraded through provision of water, storm and sanitary sewers, electricity, graded access streets and community facilities (schools, health centers and markets).

- 4) About 105 hectares of vacant land will be provided with basic infrastructure and \pm 3,800 serviced lots provided for home construction and occupancy by about 22,000 persons.

- 5) About 2,000 low-income rental housing units will be constructed to house about 10,000 persons.

In addition to BNEC and MCU, which are to receive TA to enable them properly to assume their role of planning and coordination, Implementing Agencies will include the following experienced para-statal shelter institutions:

SETU, a land development agency organized in 1972, which has developed residential and industrial sub-divisions and is implementing an experimental sites and services program.

SICOGI, the national housing authority, organized originally in 1952 which has 20,000 housing units under management.

These agencies have collaborated on an ad hoc basis on specific projects in the past and have the capacity to carry out their responsibilities as Implementing Agencies.

Their activities will initially benefit about 130,000 low-income residents. In accordance with local custom, the owners of serviced sites and of parcels in the slum upgrading neighborhoods are expected to improve their properties with additional rental units, so that ultimately the project is expected to benefit more than 200,000 low-income residents. This will make new housing available to low-income families in centrally located areas convenient to employment.

Loans to enable low-income beneficiaries to build and improve their homes will be provided by existing Ivorian financial institutions, and in addition IBRD and GOIC will provide up to \$2 million for this purpose.

Successful implementation of the project will provide the relevant agencies of GOIC with the training and experience necessary for their future collaboration to design, implement, finance and manage shelter programs for low-income families.

D. Summary Findings

1. General

The proposed program, through reduction of reliance on subsidy and adoption of a minimum standards approach, represents a substantial innovation in GOIC Housing strategy and a channeling of resources into direct benefits for the urban poor. GOIC capacity for sectoral financial planning and coordination will be increased.

From a construction standpoint, the program presents no difficulties, and the proposals fall well within the capability and capacity of the Ivorian construction industry.

The Financial Program is realistic. The resources and the ability to manage them either exist within GOIC institutions or will be developed through technical assistance.

The various solutions offered are all within the means of the lower 50% of the urban income groups. This target group will benefit from improved shelter and from improved access to community facilities such as schools and health units. In addition, the required construction will generate employment, of which the home improvements and construction components are particularly accessible to semi-skilled workers.

The proposed level of borrowing from HG sources and IBRD is well within GOIC capacity and will cause no B/P problems. Ivory Coast anticipated F/X earnings are sufficient to serve the loans, and the servicing terms of the combined HG/IBRD are favorable in terms of Ivory Coast's existing debt servicing.

Implementation arrangements are to a large extent entrusted to existing institutions and are within their existing capacity. Technical assistance is provided to MCU and BNEC to assure proper overall, project control.

SER/H will coordinate its project monitoring and evaluation with IBRD.

2. Legal

The project meets all applicable statutory criteria. The criteria check list is attached as Annex VII.

E. Project Issues

In connection with approval of the PID eight issues were identified and conveyed to the field by cable (attached as Annex II). These issues and their disposition are listed below:

1. No more than 50 percent of the financing should be allocated for low-income rental housing.

This is being done.

2. Authorization on the basis of \$10 million in both FY 76 and FY 77.

So recommended on Page 2.

3. A more detailed environmental statement.

This is shown on Page 18. A full assessment is not required by AID at this time.

4. Clarification of role of IBRD

IBRD has completed its draft feasibility study for a \$122 million Urban Sector Program for Abidjan involving Transportation, Shelter and related technical assistance, as follows:

Urban Sector Program

Transport	\$37.5 million
Shelter	49.0
Slum Upgrading	
Sites and Services	
Low-Income Housing	
Trunk Sewers	
Small Loans	
Technical Assistance	8.7
Contingencies	26.5
Total	\$121.7

SER/H and IBRD propose to finance jointly the slum upgrading, sites and services and TA components. Parallel financing will be provided under the HG program for low-income rental housing and by IBRD for trunk sewers and home loans.

IBRD plans to negotiate with GOIC in July and to present the program for approval by its Board towards the end of this year.

IBRD procedures differ slightly from those of AID in that AID authorizes a guaranty prior to negotiating the contracts. However, in terms of program planning we are proceeding along parallel lines. Assuming authorization in June, AID shall have completed the execution of its Agreements about the time of IBRD Board approval.

There has been regular coordination between SER/H and IBRD during project planning, confirmed by a series of Memoranda. The two agencies have shared review of program components. IBRD has relied greatly on the analysis of GOIC shelter institutions contained in the SER/H Shelter Sector Analysis and incorporated a number of the recommendations into its own negotiating position.

A joint AID-IBRD Disbursement agreement is also planned to coordinate disbursements on those program elements involving AID-IBRD joint financing. As presently calculated AID and IBRD will each finance 30 percent of these elements, GOIC 40 percent.

5. Detail construction standards for slum upgrading and sites and services.

These were developed by IBRD and reviewed and accepted by SER/H. They are provided in Annex IV, which reproduces a Technical Annex from the IBRD Appraisal Report.

6. Description of Community Services to be provided.

These are described in Annexes III and IV.

7. Provisions for on-site management.

These are discussed in Part IV, Implementation Arrangements, starting on Page 31.

8. Clarification of rationale for the reorganization of SOGEFIHA and for the creation of a central fiduciary in the shelter sector.

SOGEFIHA is one of several GOIC housing institutions. It has borrowed widely off-shore and partly as a result of GOIC policy in setting rents too low to cover its financing charges, now operates at a substantial loss, causing a financial drain on the sector. Reorganization and a revised policy direction from GOIC are necessary to insure optimal use of sector resources and is a condition precedent to both IBRD and AID loans.

The purpose of the central fiduciary is financial planning for the entire sector, including management of GOIC funds and of off-shore resources. Better financial management is intended to make possible more effective use of resources for low-income programs. The fiduciary will channel funds to various sector institutions (including SOGEFIHA, not under the present program but possibly at some future date after it has been reorganized).

PART II - PROJECT BACKGROUND AND DETAILED DESCRIPTION

Note: (For a detailed analysis of the shelter situation see Ivory Coast Shelter Sector Analysis - SER/H - August 1975)

A. Background

The population dynamics of the Ivory Coast are similar to most developing countries. Its population of about 5 million people is growing at an annual rate of 3% per year, including natural increase and in-migration from neighboring countries. The Ivory Coast also is undergoing rapid urbanization (expected to increase from 30% of the country's total population in 1970 to 40% by 1980) most notably in Abidjan the nation's capital and an administrative and commercial center for much of francophone West Africa. With a 1975 population estimated at 1 million, Abidjan has recently been growing at an annual rate of 11.5%. Its population is expected to surpass 2 million by 1985.

Current estimates for the period 1975-1980 indicate the need for up to 17,000 units per year to absorb population increases and to provide approximately 4,000 slum replacement units annually. About 10,000 officially-sponsored units have been built annually until this year, with additional units provided by private entrepreneurs, usually in areas without adequate infrastructure and often without authorization.

Abidjan has witnessed a housing boom which has benefited a broad section of the population. But the continued high rate of population growth adversely affects shelter, and demand outstrips supply, particularly for low-income groups.

Besides the absolute shortfall of housing units many areas contain little infrastructure beyond roughly graded streets: only about 37% of the units have running water, 25% have a bathroom shower, 30% have individual sanitary facilities and 53% have electricity.

GOIC housing policy is the responsibility of the Minister of Construction and Town Planning (MCU) who has delegated policy implementation to a number of specialized para-statal housing institutions. For several years, although GOIC national housing policy has been directed towards the needs of lower income people, efforts have been uncoordinated and, in the absence of adequate financial planning and realistic standards, an increasing drain on GOIC resources. Recently, therefore, the GOIC and its shelter-related agencies have started to explore possible alternative less costly shelter options consistent with the incomes of its lower income people and its own resource limitations. These alternatives include sites and services and programs to upgrade existing low-income neighborhoods in addition to the construction of low-income rental units.

In the course of its continuing dialogue with AID, GOIC has already taken a number of significant steps. Chief of these was the organization of BNEC, now designed to play a role as the central shelter sector fiduciary, which was accomplished in connection with the second HC program and with TA from SER/II. Other major substantive changes in GOIC policy occurred during negotiations for the proposed program, including a reevaluation of the role of subsidy, acceptance of a greater degree of cost recovery, and the reform of certain para-statal housing institutions.

The program discussed in this paper is the first full-scale attempt to implement this revised GOIC strategy.

There have been two previous HG authorizations for the Ivory Coast. The first, in the amount of \$2.1 million, was signed on August 19, 1967, and financed 391 houses. The second, in the amount of \$10 million was signed on May 5, 1972, and financed a total of 1,185 houses in two sub-projects and stimulated organization of BNEC. The administrator of the first and the borrower and administrator for the second project was SOGEFIHA. SER/H has worked closely with SOGEFIHA to improve its management of the two HG projects with some success; but a much more substantial reform of SOGEFIHA and of its role as an expression of GOIC policy is necessary and, in fact, is now in process.

B. Detailed Description

(For summary, see Logical Framework, Annex I)

1. Sector Goal

The broad sector goal to which this project is addressed is to improve the range of shelter options and related amenities for lower income urban residents thereby facilitating their assimilation into a productive urban economy. The goal is consistent with the GOIC's own policies and investment schedules which place the development of urban infrastructure in Abidjan high on the list of priorities. In addition it is consistent with the A.I.D. Shelter Sector Policy emphasis on low-income target groups and institutional development.

The Project encompasses a range of program activities designed to improve conditions and to offer a variety of options to urban residents of below median income.

In connection with the above GOIC will reorganize its shelter sector operations in order to provide adequate financial planning for the sector (through creation of a central fiduciary) and other measures to improve program replicability.

It is envisioned that a successfully completed project will both enable and encourage the GOIC to continue a minimum standards approach to the nation's lower income shelter shortage. While this particular project is primarily Abidjan-oriented, it is designed so that its concepts could be expanded to secondary growth centers.

2. Project Purpose

The project purpose is to establish and develop a coordinated Ivorian operation to design, implement, finance and manage a variety of replicable shelter projects for low-income families. Implementation will be the responsibility of the MCU and a number of existing specialized para-statal authorities as follows:

a) MCU will set up a specialized unit responsible for supervision of the various programs, monitoring, coordination of the para-statal Implementing Agencies, and project evaluation. Although legally responsible for these activities, MCU has lacked the staff to carry them out, and for this purpose will be provided TA.

b) BNEC will become the central fiduciary for GOIC-sponsored social housing programs, including management of GOIC tax revenues and of off-shore loans for social housing. It will serve as the Borrower for AID, and as the conduit for IBRD shelter financing.

BER/H is discussing with IBRD and GOIC the possibility of lending directly to GOIC, with funds passing through BNEC, as IBRD will do because its project includes both transport and Shelter. A final decision will be made during contract negotiations.

c) SETU will be responsible for construction of the infrastructure in the slum upgrading and sites and services projects.

d) One squatter upgrading site is located outside of Abidjan in San Pedro, a new port and development center for a hitherto undeveloped region. In this case implementation will be by the regional development authority, ARSO.

e) SICOGI will be responsible for the construction and management of low-income rental projects and for management of the sites and services projects after their construction by SETU.

f) House construction loans to low-income families will be made available by the Ivory Coast Credit Bank (CCI), a long-established development bank with a substantial construction materials and home loan experience; and by the Savings Division of BNEC, which has been recently organized with AID TA. Funds will be provided through Central Bank rediscounts and, in the case of BNEC Savings Division, private savings. In addition, IBRD and GOIC will together provide \$2 million for this purpose.

3. Inputs

The total cost of the urban shelter program is \$63.3 million, to be provided as follows:

HIG	\$21.0 million
IBRD	22.0
GOIC	<u>20.3</u>
	\$63.3 million

Funds will be utilized among the various programs as follows (in U.S. \$ million):

	<u>IG</u>	<u>IBRD</u>	<u>GOIC</u>	<u>Total</u>
Technical Assistance	\$ 1.0	\$ 1.0	\$ 1.2	\$ 3.2
Slum Upgrading	7.5	14.1	12.9	34.5
Sites and Services	2.5	5.9	5.2	13.6
Low-Income Rental	10.0	—	—	10.0
Home Loans	—	1.0	1.0	2.0
Totals	\$ 21.0	\$ 22.0	\$ 20.3	\$ 63.3

Additional credits from the GOIC banking system will permit loans to low-income beneficiaries to build or improve their homes.

AID and IBRD will jointly assist in financing 72 man months of TA to MCU to set up project supervision, monitoring and evaluation; and 96 man months to BNEC to train staff and organize the financial management and planning operation.

a) MCU

In recognition of the fact that MCU presently lacks the capacity effectively to carry out project supervision, monitoring and evaluation, up to 72 man months of resident technical assistance will be provided to set up a specialized unit. Advisors will include:

- one senior project planner to assist in
 - preparation and implementation of project schedules
 - review of plans and specifications, bid documents, bidding procedures
 - supervision of project inspection
 - preparation of periodic reports

- two urban planners to assist in
 - monitoring of slum upgrading and sites and services projects
 - coordination of various ministries and agencies
 - improvement of GOIC land disposition procedures

Base line data surveys and evaluation surveys also are budgeted.

b) BNEC

BNEC has not yet assumed full operations, although it has assembled a 13-man nuclear staff, including its Savings Division, which has 2500 accounts totaling \$1.5 million. A new interim general director has been appointed. To assist in the organization of the institution, to provide staff training and to assure operational efficiency SER/H and IBRD will fund up to 96 months of resident technical assistance.

Technical advisors for BNEC will include the following:

- one senior financial analyst, assigned to the general director, to advise in the general areas of:
 - financial strategy and policies
 - design and implementation of investments
 - resource management
 - internal management
 - training of Ivorian counterparts

two financial analysts to assist the Director of Finance and the Director of Credit in the following:

- project underwriting
- project preparation, including an analysis of financial needs, projections, rate of return, and cost-benefit analysis
- supervision and follow-up of projects
- loan servicing, collections, management.

SER/H, which has funded short-term TA for the Savings Division, will continue to make this available on a TDY basis in accordance with existing arrangements.

4. Outputs

The following are the contents of the program:

- a) Establishment of a Project Supervision and Evaluation Unit in MCU.
- b) A strengthened central fiduciary (BNEC) for lower income housing projects. BNEC will assume control of GOIC tax funds for low-income housing, assume responsibility for off-shore loans, and provide financial planning and management for the low-income housing sector. (Note that, in connection with this, GOIC has agreed to reorganize SOCEFIMA, so that its operations will no longer result in a drain on sector resources. This reorganization includes improved collections and delinquency controls, a moratorium on new loans, and a plan to use some OSHE funds for the next eight years to cover shortfalls resulting from GOIC-imposed low rentals.)
- c) BNEC will also operate a Savings Division, which will collect savings and make loans available to low-income households for plot purchase or for construction and improvement of housing units. Successful operation will require a trained nuclear staff of 10-12 professionals.
- d) Slum upgrading--The provision of water and sewerage lines, storm drainage, grading and some paving of roads for more than 100,000 persons living on 4,000 parcels of land in existing neighborhoods. Infrastructure design anticipates additional construction of rental units on partially developed lots, which will provide housing for an additional 50,000 persons.

Slum upgrading, representing the largest single component of the proposed urban shelter project, will improve conditions and provide increased access to community facilities in existing slum neighborhoods where the majority of the urban poor now live.

The majority of the urban poor, and particularly those in the lowest quartile of the income distribution, live in privately-owned one-room rental units constructed around an open courtyard, which is used for cooking and washing. In addition to those in the very lowest income brackets, who do not have the resources to build their own shelter, private rentals offer the only housing options open to foreign African workers, who may constitute as much as half the population of Abidjan and to whom as a matter of policy the GOIC does not allocate building lots.

After upgrading, residents, owners and tenants, will continue to share access to sanitary facilities and water with others living around the courtyard.

Criteria for selection of the specific sites included-

- low-income population
- proximity to employment
- ease of access to public transportation
- inadequate existing secondary and tertiary infrastructure plus proximity to existing or programmed primary infrastructure.

Undertaking this program represents a major policy breakthrough for GOIC, in that it will now devote an increasing proportion of its resources to programs directly benefiting the urban poor in neighborhoods in which they now live, instead of engaging in demolition. It represents a medium-term planning objective, in that the increased infrastructure will permit construction of more rental units, and hence increased low-income housing, centrally located and without undue extension of the Abidjan urban area. Finally, it represents an important program significantly to upgrade conditions in the private rental market, which has housed and will continue to house more than two-thirds of the target group in Abidjan.

e) Sites and Services--the provision of 3800 lots with utilities (water, sewers, electricity), all-weather access and community facilities, available on long-term (20 year) land lease on which low-income families can build their homes and possibly, one or two rental units, thereby increasing their income. The project design has benefited from the experience of GOIC's existing 20-hectare pilot sites and services program. Construction will be by SETU, management (ie. selection of beneficiaries, collections, supervision of self-help construction) by SICOGI.

This is the only access to home ownership offered low-income families. If they elect to add rental units, they will trade off privacy (shared sanitary facility, open cooking area) against increased income.

Initial occupancy is estimated at 22,000 persons. Construction of additional rental units can provide shelter for another 22,000.

In accordance with GOIC policy the lots will be offered on a land-lease for 20 years. This policy was adopted for the experimental sites and services program, and SICOGI has reported no difficulty in finding beneficiaries. GOIC considers 20 years sufficient time for a low-income beneficiary to build and amortize a decent home. Should this policy prove more difficult to implement than planned by GOIC, SER/H will recommend alternate terms (longer lease-hold, direct sale).

f) Low-income rental public housing--⁺2,000 low-income one to three room rental housing for about 10,000 persons, to be constructed and managed by SICOGI.

Public rental housing, formerly the major element of GOIC shelter strategy for low-income families has been greatly reduced in importance, as recommended in the AID Shelter Sector Study, but still remains an important element of any overall shelter program by offering sanitary shelter and privacy beyond that available in the private rental market to families either unwilling or unable to construct their own shelter or to assume the obligations of home ownership. Against home-ownership and the possibility of sub-leasing, the trade-off for these families is the immediate availability of shelter without having to construct it and privacy, otherwise unavailable to renters.

A major innovation of the HG-financed portion of SICOI's low-income rental units will be to incorporate cost recovery of secondary and tertiary infrastructure into rental payments. This cost previously had been subsidized by GOIC, and as a result it was possible to fix rents as low as \$20 a month. Acceptance of the principle of cost recovery for low-income rental housing infrastructure marks a major GOIC policy shift directed towards improving overall financial planning for the shelter sector.

In order to assure that rentals will be within the means of low-income groups, while at the same time providing replicability through cost recovery, SICOI will amortize the infrastructure over 40 years. It will further institute a system of escalating monthly payments: rentals as low as \$26 a month will be charged initially, with full cost recovery assured by higher rentals which can be changed later on as incomes rise as a result of wage increases and inflation.

PART III

A. Technical Analysis

1. Slum upgrading

The technical aspects of this program were prepared by BCEOM, a private French consultant under contract to IBRD, and BNETD, a parastatal GOIC planning and technical agency, for SETU. These studies were reviewed and approved by IBRD. Design criteria were also reviewed by the Technical Division of SER/H and found acceptable.

a) Sites

There are five sites ranging in size from 19 to 112 hectares and totaling 272 hectares. Three are located in existing 20-year old slum neighborhoods of Abidjan; one is a relocation area from an Abidjan slum clearance project settled 5 years ago; and the fifth is a squatter settlement that started about 8 years ago on the outskirts of the new port of San Pedro, a regional development center.

The sites are well located with respect to employment, public transportation and primary infrastructure and preliminary studies indicate they are at least 90% occupied by low-income families.

b) Existing conditions

Existing infrastructure in the five areas is inadequate. Most of the streets, including some main arteries, are unpaved; many of the others are poorly graded and have suffered badly from erosion. The erosion problems have been aggravated by inadequate or nonexistent storm drainage networks. Sanitary sewer systems are, for the most part, non-existent, although there are open air sewers in some areas; and waste products are disposed of under unhealthy conditions. A basic water supply system exists, but in most cases it must be substantially enlarged and/or expanded. Some street lighting is in place, but few of the units have separate electrical connection.

Community facilities are inadequate.

c) Improvements proposed

i) Filling, grading, compacting and gravelling of roadways and walkways to specifications varying according to the topography and intended use, and paving of streets necessary for busses, garbage collection, fire trucks and market activities.

ii) A storm drainage system serving all parcels, consisting of open, lined trenches and collecting basins. The width and depth of trenches will depend on the runoff in that particular area. Wherever possible, shaped roads or walkways will double as drains.

iii) The extension of the potable water systems to all lots, tapping the existing network wherever possible.

iv) A sewer network serving all lots plus extension of trunk sewers, where necessary.

v) The provision of elementary schools, health units and covered market facilities, as needed, based on GOIC criteria.

Individual sewer services will be supplied to each lot. Water and electrical connections will be provided at the request of the user by the respective utilities for lump sums of \$40 and \$20 respectively.

The proposed infrastructure improvements represent a minimum cost solution, designed particularly to deal with the erosion caused by heavy rainfall. Design standards provide adequate environmental protection, but fall short of the level of infrastructure GOIC provided in middle and upper-income neighborhoods. This is deliberate in order to minimize the possibility that private landlords will be encouraged to increase rents to a point beyond those that can be afforded by the target group.

Community facilities, with the exception of one health center, are limited to those designed to serve the immediate neighborhood.

d) Contract and Construction Procedures

Construction contracts will be let by competitive bidding in accordance with GOIC and IBRD criteria. These are acceptable to AID. SETU will be responsible for the infrastructure, MCU for the community facilities. Both institutions have considerable experience in this, and plans and specifications will pose no problem to local contractors.

e) Cost Estimates and Project Financing

Project costs:

primary infrastructure	\$ 3.8 million
secondary/tertiary infrastructure	23.5
community facilities	4.7
overhead	<u>2.5</u>
total development cost	\$34.5

Project financing:

HG	\$ 7.5 million
IBRD	14.1
GOIC	<u>12.9</u>
total financing	\$34.5

HG financing will be limited to a portion of the secondary/tertiary infrastructure, the benefit of which may be directly attributed to the individual parcels. These are the costs--averaging from \$950 to \$1,500 per dwelling unit--that will be amortized by payments from the direct beneficiaries. Costs of primary infrastructure and community facilities will be amortized from general tax revenues.

Site specific descriptions and cost breakdowns of the improvements to be provided are contained in Annex III. Design standards are contained in Annex IV.

2. Sites and Services

As with the slum upgrading, technical preparation for this program was by BEEOM and BNETD for SETU with review and preliminary approval by IBRD. Design criteria were reviewed and found acceptable by the Technical Division of SER/H.

a) Sites

Two sites, one of 35 and the other of 70 hectares, have been selected for development with 3815 building lots. One site is adjacent to a slum upgrading sub-project in a major growth center for Abidjan. The other is part of a larger, 150-hectare development that will include small serviced lots for low-income families, lots suitable for artisanal activity, residential lots (which will not be financed as part of the project, although proceeds from their sale will be used to cross-subsidize the price of the low-income lots), and one of the HG-financed low-income public rental projects. This second site is located in an area which, despite its excellent location, could not be developed because of the low-lying nature of some of the terrain. Starting in 1969 GOTC financed filling operations with sand dredged and piped from the nearby lagoon and thus far has financed construction of more than 5,000 public rental housing units in one portion of the general area. The SETU 150-hectare sub-project will initiate the planned development of the last major available close-in area remaining for new low-income projects.

Both sites are well located in areas of population growth and convenient to employment and public transportation, and are suitable for low-income projects.

b) Planned Improvements

The project will offer six alternative lot types and sizes, ranging from 100 to 200 square meters. Artisanal lots will be 375 square meters, large enough for mixed residential-commercial use.

Two-thirds of the lots (about 2700) will be of the same design as those of the experimental sites and services project; the balance offer alternative site layouts and dimensions.

In general standards for infrastructure and community facilities will be similar to those for slum upgrading. Lots will have either direct access to roads suitable for motor vehicles or indirect access (no more than 100 meters) via footpaths. Wherever possible roads and walkways will be designed to double as drainage networks. Each lot will be provided with a basic sewer connection.

Elementary schools, health facilities and markets also will be provided where needed. The concerned ministries have agreed to staff and equip these facilities.

Infrastructure standards are adequate, and the community facilities are designed to serve the neighborhood.

c) Contract and Construction Procedure

These will be the same as for the slum upgrading programs described above. Again, the institutions are experienced and the construction capacity available locally.

d) Cost Estimates and Project Financing

Project costs:

Secondary/Tertiary Infrastructure	\$ 7.8 million
Community Facilities	4.5
Overhead	<u>1.3</u>
Total	\$13.6 million

Project Financing:

HG	\$ 2.5 million
IBRD	5.9
GOIC	<u>5.2</u>
Total	\$13.6 million

HG financing will be limited to a portion of the secondary/tertiary infrastructure, which costs, averaging from \$1100 to \$1790 per parcel, will be amortized by land lease payments from project beneficiaries. Costs of community facilities will be born by GOIC from general tax revenues.

One financing innovation will involve cross-subsidy of the low-income lots with proceeds from the sale of the higher income residential lots.

Site specific descriptions and cost breakdowns of the improvements are contained in Annex III. Design standards are contained in Annex IV.

3. Low-Income Rental Public Housing

HG financing will be used for approximately 2,000 units housing 10,000 persons to be constructed and managed by SICOI on two sites in Abidjan. SICOI also has requested funding for an additional 200 units in Bouake, the country's second city. If the Abidjan projects do not require use of the full \$10 million, as appears now likely, this and other possible sub-projects will be considered within the financial and policy limitations of the authorization.

a) Sites

The units will be built on two sites forming parts of integrated and ongoing developments located in the same general area and close to the major sources of employment and to public transportation.

This general area, as described above could not be developed despite its excellent location because of the low-lying nature of much of the land, until starting in 1969 GOIC undertook filling operations.

One site, will complete an on-going phase of this development with 766 units. The other site, on which 1100 units can be built, will be a part of SETU's 150 hectare project described above.

The site design is simple and effective, and design and standards do not differ greatly from that for sites and services. Vehicular access is by peripheral and through paved roads, but access to most units is by pedestrian walkways. Parking bays are provided at a ratio of one space per three dwelling units

Both sites are suitable for low-income projects.

b) House Construction

Units to be constructed will be 25-49 square meter one-story row houses with one to three rooms and interior court. The kitchen, WC and shower are in a secondary structure in the rear of the court. To minimize cost there will be no ceiling or interior plastering, a turkish-type W.C. combined with shower, and but a single electrical outlet per room. These units are virtually the same as have been constructed by SICOI for low-income families and offer a marketable shelter alternative to these families.

c) Construction and Contract Procedures

Construction contracts will be let through competitive bids in accordance with GOIC policy. Using a procedure already successfully implemented in the second Ivory Coast HG project, the sub-projects will be bid in small lots so that medium-sized Ivorian contractors can bid.

d) Cost Estimates and Project Financing

Specific costs for the various unit types proposed are in Annex III.

Of interest here is a major innovation in GOIC policy in that the HG-financed portion of SICOI's low-income housing will incorporate cost recovery of secondary and tertiary infrastructure into rental payments. This cost previously had been subsidized by GOIC, and as a result it was possible to fix rents as low as \$20 a month. Acceptance of the principle of cost recovery for low-income rental housing infrastructure marks a major GOIC policy shift directed towards improving overall financial planning for the shelter sector.

In order to assure that rentals will be within the means of low-income groups, while at the same time providing replicability through cost recovery, SICOI will amortize the infrastructure over 40 years. It will further institute a system of escalating monthly payments: rentals as low as \$26 a month will be charged initially, with full cost recovery assured by contractually determined higher rentals to be changed later on as incomes rise as a result of wage increases and inflation.

Site specific descriptions and cost estimates are contained in Annex III.

4. Environmental Effects

Implementation of these urban programs will also result in environmental improvements. Severe erosion will be checked by construction of a storm sewer system, and the elimination of stagnant water will be an improvement. Installation of a sanitary sewer system also represents an environmental improvement to the neighborhood.

The GOIC is working with the IBRD on a new sanitary sewage system for the entire city of Abidjan, and construction of the first phase has started. When completed, this network will discharge waste water at one point out in the ocean, rather than at several places in the lagoons as presently occurs. Lessening of pollution of the lagoons also will be an environmental improvement.

Development of vacant land with low-income housing also should have no adverse environmental effects. Provision of adequate storm drainage will reduce erosion and the health hazards posed by stagnant water. Most of the sites are used in part for refuse dumping, and residential development will eliminate this.

The sites do not have significant vegetation, and the planting of public green spaces should actually improve the environment.

The sites are urban in character, and the residential development planned poses no problem of pollution or other detrimental environmental effects.

B. Financial Analysis and Plan

1. Financial Effect on Project Participants

The target population, defined as those making below the median urban income, may be identified as those with monthly incomes of from \$90 (minimum wage of CFAF 20,000 for full time unskilled labor effective January 1, 1976) and \$202.

Distribution within this lower income group has been estimated as follows, based on an analysis updating data available in the Shelter Sector Analysis in accordance with the 1974 and 1976 increases in minimum wages.

Urban Household Income Distribution

<u>Income</u>	<u>%</u>	<u>Cumul</u>
less than 20,000 (\$90)	13.0	—
20,001 - 25,500 (\$113)	8.0	21.0
25,501 - 30,500 (\$131)	14.0	35.0
30,501 - 38,000 (\$170)	5.0	40.0
38,001 - 44,000 (\$195)	9.0	49.0
44,001 - 51,000 (\$227)	5.5	54.5
51,001 - 56,000 (\$250)	5.5	60.0

Median income according to this calculation would appear to be about CFAF 45,500 (\$202). The IBRD study places it at CFAF 47,000 (\$210).

The table on Page 20 shows the monthly repayment requirements for various components of the program and the percentage of the population that can afford these various solutions.

2. Cost Recovery and Financial Effects on Implementing Agencies

a) Cost Recovery

Slum upgrading cost recovery will be effected primarily through the tax system and through water and electric use charges. The sewerage tax included in the water tariff and the drainage tax included in the general property tax provide funds for FNA, which will finance sewerage and drainage primary infrastructure. Street lighting is recovered through electricity charges.

The cost of other secondary and tertiary infrastructure will be recovered partially through general property taxes and partially through a betterment tax.

To levy property taxes, owners in these neighborhoods will be required to complete the legal formalities to obtain definitive title and so place the property on the tax rolls. (Although almost owners are legally occupying the land, they have not carried through their legal obligation to secure fee title.)

Shelter Option	Cost per unit	Method of Repayment	Amount of Monthly Payment	Affordable to Income group (Percentile)
<u>1. Slum Upgrading</u>	from 817,000 to 2,500,000 (\$3600-\$11,000) per lot depending on sub-project. Each lot contains a principal dwelling unit and an average of 5 rental rooms	Primary infrastructure through general taxes and utility charges. Secondary and tertiary infrastructure through property taxes and tax on betterment. Estimated increase in rentals not to exceed 15%.	Existing rentals of 4000-6000 raised to 4600-6900 (\$20-31)	18,500 to 27,000 (\$80-124) 7th to 25th percentile
<u>2. Sites and Services</u>	a) A range of CFAF 250,000-400,000 per lot (\$1111-1790) Construction of one or more two-room core unit costing CFAF 300,000-600,000 (\$1,333-2,667)	20-year land lease 25% savings, loan of 225,000 (\$1,000) for 10 years at 10% = 2,975/month or, for 2-room, 25% savings, loan of 450,000 (\$2,000) 10 years at 10% = 5950/month	2700-4400 (\$12-19) 2975 (\$13) S/T 5675-7375 (\$25-42) Alt S/T 5950 (\$26) 8650-10350 (\$32-45)	22,700-29,500 (\$100-131) 25th to 35th percentile
		Rent for 2nd room	5000 (\$22)	20,000 (\$89) 13th percentile
	b) Evolutifs, CFAF 742,500 (\$3,300) plus construction of one room core unit at CFAF 300,000 (\$1,333)	sales, one-third savings, loan 495000 construction, 25% savings, loan 225000 total loan 10 years, 10% 720000	9515 (\$42)	380000 (\$170) 40th percentile
<u>3. Low-Income Rental</u>	CFAF 736,225-1,408,955 (\$3270-6,260) depending on size and infrastructure	monthly payments for unit amortized over 25 years, with escalating payments, infrastructure over 40 years; BNEC roll-over	5900-10,340 (\$26-46)	23,600-41,400 (\$105-184) 20th to 45th percentile

Application of the betterment tax requires implementation of legislation dating back to 1930, which permits application of a tax of up to 50% of the increased value resulting from public improvements. For this project the increased value will be calculated as equal to the cost of the secondary and tertiary infrastructure. The tax will be collected over 20 years, at a rate which includes an interest rate equivalent to that of the IBRD loan.

The IBRD estimates that the betterment tax represents an average charge per plot of CFAF 4500 (\$20) per month and the property tax CFAF 2100 (\$9)--a total of \$29 a month, to be divided among existing rental units and those to be built (3 or 4 per lot). Inasmuch as the majority of the residents in existing slums are renters, living in units developed around open courtyards in traditional fashion, it is presumed that landlords will either pass on their increased costs to existing tenants or add rental units to cover the cost. In general, GOIC studies have indicated that the betterment tax can be so calculated as not to require a more than 10-15% increase in rents, this being considered the maximum that can be absorbed by existing residents.

Sites and Services cost recovery will be achieved through monthly land-lease payments, to be collected primarily through pay-roll deductions. Primary infrastructure and community facilities will continue to be a GOIC responsibility.

Low-Income Rental Housing cost recovery, formerly limited to construction of the housing units itself with infrastructure a GOIC subsidy, will incorporate both housing unit and infrastructure under the proposed program. In order to bring monthly payments within the means of the target population, infrastructure costs will be amortized over 40 years, and monthly payments on house construction will be escalated from an initial low level at a rate not to exceed 3% per year, so that the loan will be fully amortized at the end of a 25-year term. BNEC will provide the required roll-over financing in accordance with its statutes.

b) Availability of Implementing Agencies' Resources

GOIC resources totaling \$20.3 million will come from three sources: BSIE, the capital investment Budget; a special tax to be used for infrastructure for low-income housing (formerly administered by OSHE), and the National Sewage Fund (FNA) set up under IBRD guidance to amortize sanitary sewage construction through water rates.

BSIE will provide about \$7.4 million in accordance with its regular procedures. BSIE has indicated it will budget these funds over four fiscal years, representing no more than \$2 million in any one year, or less than about 1% of the 1975 BSIE of \$240 million, and is within its capacity.

Special Tax Funds for infrastructure (ex-OSHE) are deposited in a special Treasury account and will be administered by BNEC. Those funds are estimated to total CFAF 5 billion (\$22 million) a year during the period of project execution, of which no more than \$4 million in any one year will be required for the project.

FNA will contribute \$1.2 million for primary sewage lines.

3. Summary Cost Estimates and Financing Plan

The Financing Plan for execution of the slum upgrading and sites and services projects involves coordination of funds from a number of sources, as indicated in the flow chart on Page 25.

Disbursements

1. HG and IBRD disbursements for slum upgrading and sites/services will be coordinated through a Joint Financing Agreement. Disbursements will be made against submission of evidence of work in place by BNEC, which will serve as financial controller.

2. HG and IBRD funds will move through the usual GOIC channels for off-shore loans and will be applied to project expenditures by Implementing Agencies in accordance with AID's Implementation Agreement and the IBRD Loan Agreement.

3. GOIC special tax monies for urban infrastructure are deposited in a special account at the Treasury, administered by BNEC, and will be applied in accordance with the agreements.

4. In accordance with GOIC practice, funds from BSIE will be paid out directly to Implementing Agencies.

5. Disbursements for the low-income rental housing will follow usual HG practice. Loan drawdowns will be made upon evidence of completed and occupied units presented by SICOI, the Implementing Agency, through BNEC.

The flow charts also identify the source and application of funds for home loan financing by individual beneficiaries.

Sites and Services beneficiaries will use their savings, loans from relatives upcountry, financing provided by CCI and the Savings Division of the new BNEC, and the usual sources of financing available in the informal sector (through which have been financed in recent years perhaps 10,000 units annually in Abidjan).

RHUDO and IBRD will work with CCI and BNEC to assist these institutions in expanding their loan programs suitable for lower income groups particularly non-salaried beneficiaries.

Individuals will apply for loans to the institution(s) of their choice; loan repayments will be a matter of individual contract between the lender and the project participant.

SUMMARY COST ESTIMATE AND FINANCIAL PLAN

(US \$ 000)

PROJECT PAPER

Source	AID	Host Country	HIG	IBRD	Total
Use					
1. MCU and TA for BNEC		1,200	1,000	1,000	3,200
2a. Slum upgrading		12,900	7,500	14,100	34,500
b. Sites/Services		5,200	2,500	5,900	13,600
c. Low-income housing			10,000		10,000
3. Home Loans		1,000		1,000	2,000
(Includes 10% contingencies 12% inflation)					
Total		20,300	21,000	22,000	63,300

COSTING OF PROJECT OUTPUTS/INPUTS
(In \$000 or equivalent)
Project Paper

X New
Rev # _____

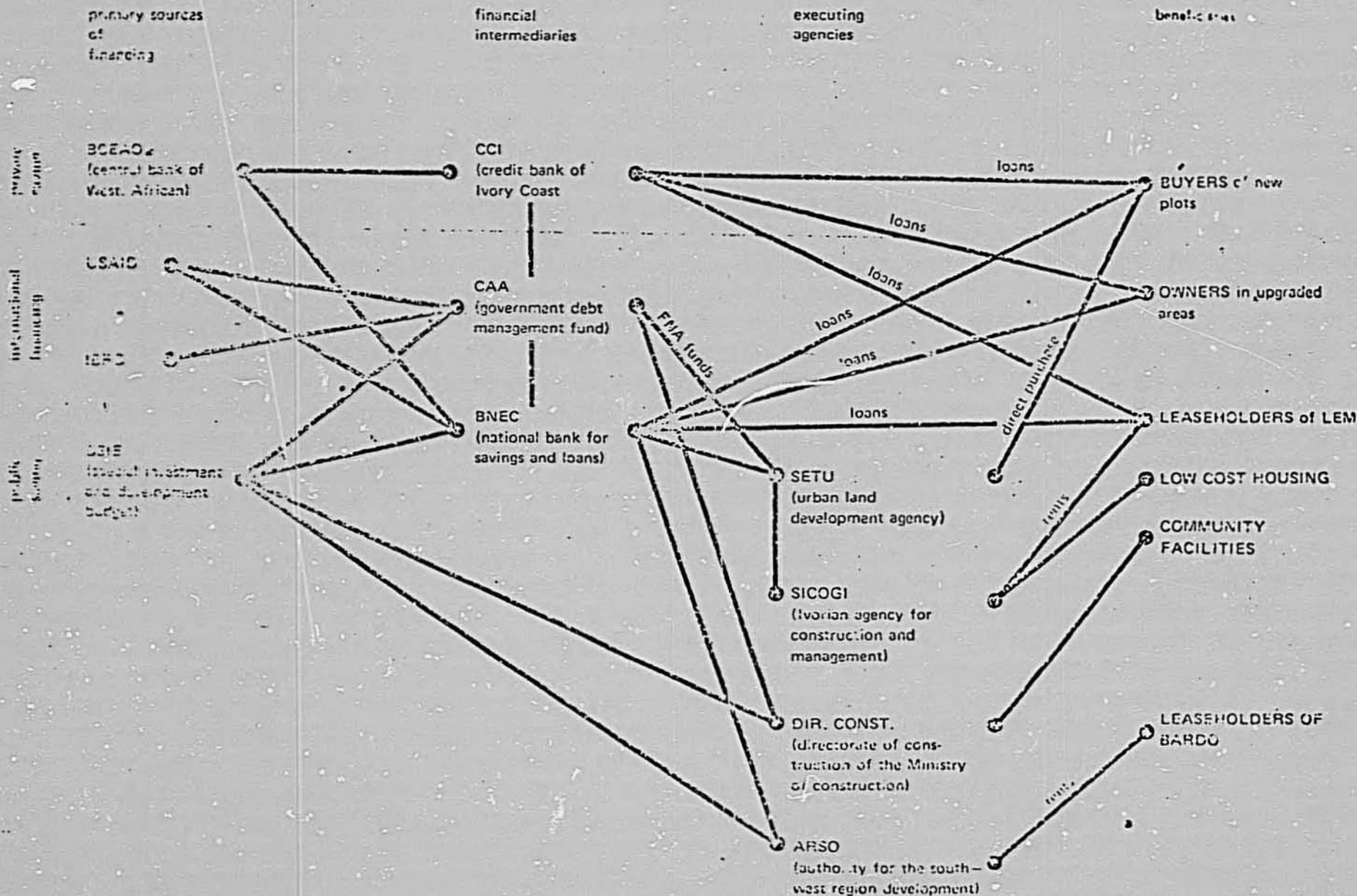
Project # 681-HG-003

Title _____

Project Inputs	Project Outputs				TOTAL
	TA # 1	Slum # 2	Sites/Services # 3	Housing # 4	
AID Appropriated					
Other U.S. HIG	1,000	7,500	2,500	10,000	21,000
Host Country	1,200	12,900	5,200 1,000(loans)	—	20,300
Other Donors IBRD	1,000	14,100	5,900 1,000(loans)		22,000
<u>Total</u>	3,200	34,500	15,600	10,000	63,300

ABIDJAN URBAN DEVELOPMENT PROJECT

Financial Network for the Shelter Component



4. Summary and Conclusion

a) Summary

The project financing and cost recovery are calculated so that the units will be priced so that they can be afforded by, and hence are suitable for, low-income urban families. This includes also house construction and improvement loans.

An important aspect of project monitoring will be a determination of the extent to which home loans are made available to low-income beneficiaries, particularly those with income from the informal sector, and assistance in the application of underwriting techniques designed to expand the availability of financing to even lower income groups. Project monitoring will also report on the status of renters in the slum upgrading areas.

In this way the actual impact of the project, as designed, on the target population can be evaluated.

The Implementing Agencies through GOIC have available sufficient financial resources to meet their responsibilities. The flow of project financing and loan repayments are compatible with Ivorian practice and existing institutions, and should pose no unusual difficulties.

b) Conclusions

The Financial Plan as presented is adequate, and the Project is sound.

C. Social Evaluation

The target group for this project are those residents of Abidjan whose family income is between \$90 and the median monthly income of \$210. Though there may be some differentiation from one area of the city to another, most employed persons in this group are specialized workers, merchants, artisans, semi-skilled and unskilled workers, service and household employees. All of the options offered in the program will be affordable to target group and the areas being impacted assure that most beneficiaries will be from this group.

Housing is important to development in both economic and welfare terms. In Abidjan it typically constitutes 25% to 30% of household expenditures, and represents significant investment and capital formation, often yielding a flow of income. This project will increase the value of Abidjan housing stock; savings in the form of new construction, will be encouraged, and employment will be stimulated in both the formal and informal construction sectors. (IBRD estimates 3,000 new jobs will be created in connection with project activities.)

Two of the primary welfare benefits to be derived from this project include the convenience and improved health resulting from easy access to Abidjan's potable water supply and to sanitation facilities. Construction of community facilities, such as primary schools, health centers and markets will provide greater access to these services and thereby contribute to the social welfare of low-income residents.

It is not perceived that any of the shelter options would cause significant social disruption. Both the sites and services and low rent components will affect so called "volunteer beneficiaries". That is, they will have to make a conscious effort to apply for and relocate into project areas. The assumption is that the beneficiaries themselves should be able to tell if they are financially or otherwise suitable for the project. Implementing Agencies will be asked to apply an income ceiling to applicants which, while not completely effective, will tend to limit beneficiaries to those in the target group.

In the slum upgrading component, because the existing layout of the project areas is a grid-like pattern virtually no relocation is anticipated. Without unforeseen exceptions, most service lines can be laid along public rights of way.

Higher densities as well as higher taxes may be anticipated. Densities, however, should not rise above those in the more traditional areas of Abidjan - densities which the utilities as planned can support and densities which are compatible with urban African life. The GOIC is in fact encouraging higher densities in existing areas in an effort to slow the centrifugal spread to new areas.

In the slum upgrading areas, the owners will pay for the benefits received through higher taxes, and will pass these increased costs on to their tenants through increased rents. The project design is such that these rent increases should not exceed 15%, and studies by IBRD and its consultants, and observations by the RIIUDO indicate that market conditions will tend to limit these increases. The character of the neighborhood, the nature of the infrastructure improvement, and the types of housing are all suitable for low-income families, and even after the projected increases, these units will still be affordable by households in as low as the 7th to 25th percentile of the urban population.

Property owners in existing areas to be upgraded as well as sites and services beneficiaries are expected to add additional rental units. This is an established and widespread practice in West Africa which would be difficult to change or control. Moreover, the informal sector is currently building the majority of Abidjan's low-income housing. Any realistic housing policy cannot afford to discourage or ignore this factor. This process will also result in a net increase to the supply of centrally located low-income housing.

Conclusion

Program outputs can be afforded by the target population, and are assimilable without significant disruption of social patterns.

In general, access to these direct outputs (infrastructure, social services) and indirect outputs (increased employment possibilities) should bring about higher earnings and increased welfare for lower income families.

D. Economic Evaluation

Since this kind of program is not, by its nature, a revenue producing project, the normal quantitative comparisons of present values or internal rates of return will not be used as evaluation tools in this project paper. IBRD in its Appraisal Report does undertake such an analysis based on computed rents and land values, and estimates an economic rate of return of about 29% and a social rate of return of about 37%.

This project will encourage the GOIC to utilize its available shelter sector resources in addressing the needs of lower income people through minimum standards programs. Although the cost of the options is kept as low as possible, thereby assuring that they will be affordable to the lowest possible income level, the project is nearly self-supporting and will not impose a drain on or distort overall Ivorian resources.

In a general economic sense the economy of the Ivory Coast has sustained an annual growth rate of 6-7% net of inflation since independence in 1960. This rose to a much higher level in the early 70's (up to 13% in 1974), then dropped back to 2-3% in 1975. Growth rates are projected to continue for the next few years at about 6-7%, net of inflation.

The GOIC has carried off this real economic growth with the assistance of substantial foreign borrowing. Debt service as a ratio of export earnings was 5.7% in 1968-1970, rising to 10-12% in 1975, and will probably continue to rise as the grace period of loans contracted during the 60's comes to an end and amortization payments must begin, and as donors will continue to reduce the grant component of their assistance.

However, foreign exchange earnings from the Ivory Coast's varied export agricultural commodities are expected to continue steady, and the Ivory Coast appears capable of sustaining development borrowing for the next decade at least at its present level of about \$130 million a year.

The proposed urban shelter program calls for combined borrowings from HG sources and IBRD at essentially the same terms of \$43 million over three years, or about \$14 million a year. Annual debt service on the combined HG/IBRD loans will be about \$4.6 million (presuming 9.5%, 25 years), representing a debt service ratio (repayment as a percentage of original principal) of .106; whereas the total Ivory Coast external debt service in 1973 totaled \$52 million on a total drawn down external debt of \$365.8 million, or a debt service ratio of .144. Thus the HG/IBRD loan servicing terms are more favorable than the existing ratio and, in this respect, represent a desirable developmental resource for the Ivory Coast.

Part IV. Implementation Arrangements

A. Analysis of the Recipients' and AID's Administrative Arrangements

1. Recipient

To a large extent the proposed program will be executed through existing GOIC and para-statal agencies and within the limits of their present capacities. A detailed description of these agencies, together with an evaluation of their performance, is provided in the Shelter Sector Analysis dated August, 1975. This section will point up any significant problems in the operations of any agency and identify the corrective measures proposed.

a. Borrower

BNEC for the HG loan. SER/H is discussing lending directly to GOIC and tracking the IBRD financial circuit. This will be resolved during negotiations.

GOIC for the IBRD loan, which will run to GOIC because it includes both urban transportation and shelter components. IBRD funds loaned to GOIC for shelter purposes will then run to BNEC.

Products of both off-shore loans will be deposited in the CAA, a public agency that serves GOIC as a bank of deposit and public debt manager.

b. Implementing Agencies

BNEC has been designated as a central fiduciary for social housing programs with responsibilities for:

- sector financial planning and management, particularly for low-income programs
- external borrowing
- application of revenues from special tax to provide infrastructure for low-income projects
- operation of a Savings Division, which will encourage thrift and make loans for construction and home improvement

SETU, the national urban land development agency organized in 1972, will be responsible for construction of infrastructure for slum upgrading and for construction of the sites and services projects. SETU has previously constructed infrastructure for industrial and residential subdivisions, executed a pilot sites and services project, and it is the implementing agency for the IBRD-financed Abidjan sewer project. Project plans and specifications are to be prepared by existing consultants, and with the addition of up to

six expatriate project supervisors, SETU will have the capacity to execute its obligations under the program.

SICOGI, the national housing agency organized in 1952, will be responsible for design and construction of the low-income rental housing and for management of the sites and services projects, which are to be offered on long-term land leases.

The ±2000 units of rental housing it proposes to construct in the next two years with HIG financing are substantially less than the 3,000 to 5,000 a year it constructed during the last 4 years with French financing and are well within its capacity.

SICOGI expects to collect monthly payments on the sites and services units through payroll reductions, in accordance with procedures established during the pilot program. With more than 20,000 housing units under management the addition of the 1,300-1,500 units a year of sites and services is well within SICOGI's capacity.

MCU (the Ministry of Construction and Town Planning) will be responsible for project coordination, through a specialized unit to be established. MCU will also carry out its regular responsibilities of contracting for the construction of community facilities for the relevant agencies (Health, National Education, Municipalities).

ARSO, the development agency for the South-West Region, will be responsible for executing the slum upgrading program in the Bardo neighborhood at San Pedro. ARSO has initiated the first-phase of this program covering 30 hectare, and this experience will be evaluated prior to initiating the second phase.

CCI, the Ivory Coast Credit Bank, is indirectly - but critically - involved through its existing mortgage and construction materials loans programs. A total of 1200 construction materials loans a year may be necessary for the 3500 lots in slum upgrading areas. These loan dossiers are relatively simple, and processing is within CCI's present capacity (it processed 2,450 in 1973/4).

Sites and services beneficiaries could require up to 800 mortgage loans a year. Processing an additional ±65 mortgage loan applications a month will require a two-thirds increase of the underwriting capacity, but not necessarily the staff, of CCI's 17-man Credit Department. CCI is well organized, and the training of an incremental addition of up to 4 or 5 additional staff is within its capacity.

It would appear that the provision of loans to slum upgrading and sites and services beneficiaries is administratively within the capacity of CCI.

In addition, the Savings Division of BNEC will also make home construc-

tion loans. BNEC is a new institution, lacking the experience and resources of CCI. Its participation in this aspect of the program will provide it with the experience necessary to enable it to play a greater role in the generation of local savings.

2. AID

AID/HG disbursements will be administered in accordance with regular practice. Agreements will be executed between AID and the U.S. Investor (Contract of Guaranty), the Borrower and Investor (Loan Agreement), AID and the Borrower (Implementation Agreement) and AID and GOIC (Host Country Guaranty). The Implementation Agreement will spell out use of the HG funds for the various programs and the relationship among AID, the Borrower and the Implementing Agencies. Disbursements will be made in accordance with these Agreements upon submission of the required documentation by BNEC.

The only unusual feature will be the negotiation with IBRD of a joint AID/IBRD Disbursing Agreement, which will cover these details with respect to joint financing of the slum upgrading and sites and services components.

Project monitoring will be the responsibility of the Regional Housing Office in Abidjan, supplemented by whatever TDY is necessary by SER/H and/or its contractors.

B. Implementation Plan

Plans and specifications for the sites/services and slum upgrading projects are already in preparation under contract by, primarily, the parastatal National Office for Technical Development Studies (BNEDT), which is under the general supervision of the Ministry of Planning. Low-income housing plans and specifications have been prepared by consultants and tested by SICOI in other projects.

Bids are public and competitive, and contracts will be awarded to third parties under normal GCIC procedures.

Following a procedure used successfully under the previous HG and which is acceptable to SICOI bid packages for the low-income housing will be subdivided so that medium and small sized Ivorian contractors can bid.

Construction will be monitored in accordance with AID and IBRD practice.

Disbursements will be made upon documentation provided by BNEC, based on reports from the Implementing Agencies, and AID/IBRD coordination will be spelled out in a Joint Disbursement Agreement.

Timing is set forth on the Planned Performance Tracking Network Chart attached as Annex VI.

C. Monitoring and Evaluation

Monitoring and evaluation of the sites and services and upgrading components will be carried out by the special unit to be established as a part of project cost within the MCU. This unit will be responsible for gathering and treating base line data prior to project execution as well as for continuous updating of information.

In the case of slum upgrading, a census of existing conditions will be taken prior to project execution to identify:

- socio-economic data on residents including sources and amounts of income
- status of land ownership and tenure
- number of units, total to be upgraded and total to be demolished
- rentals charged

During project execution the MCU unit will gather data, with particular reference to the following inter alia:

- appropriateness of technical designs and of level of standards;
- effectiveness of construction loan program;
- use of self-help vs. contract labor by beneficiaries;
- population movements, previous residence of beneficiaries;
- sources, distribution and changes in family income;
- changes in community health conditions or organization;
- private rental levels

During construction SICOI will be required to forward to SER/H periodic construction and implementation reports on the rental units, including income distribution data on the beneficiaries.

Base line and updated data will bring to the surface for evaluation any latent project implementation difficulties, particularly those related to the social effects of the project. Implementing Agencies will also be requested to encourage and assist in generating beneficiary feedback during final planning and project implementation. Feedback also will be encouraged by staging sub-projects, so that actual preliminary field review can be made of program components before additional sub-projects are fully committed.

SER/H and IBRD will continue their close collaboration with particular emphasis on the Monitoring and Evaluation aspect of Project execution.

D. Conditions, Covenants and Negotiating Status

AID and IBRD will coordinate closely their negotiations and RHUDO and GC/H will participate as members of the IBRD Negotiating Mission, scheduled for July.

SER/H and IBRD have identified two conditions precedent to negotiations:

- 1) presentation of a plan for SOGEFIHA reorganization and achievement of financial equilibrium
- 2) opening balance sheet and forecast operation account for the central fiduciary (BNEC)

SER/H will review with IBRD during its negotiations its draft Implementation Agreement and the two agencies will prepare the draft joint Disbursement Agreement.

Following selection of a U.S. Investor the necessary Agreements will be negotiated, with execution planned to coincide with IBRD Board approval late in 1976.

Annexes

- I. Logical Framework
- II. FID Approval Cable, State 50262
- III. Proposed sites and Project Costs
- IV. Design Standards and Specifications for Shelter
- V. Map of Project Areas
- VI. Planned Performance Tracking Network Chart
- VII. Statutory Criteria Checklist
- VIII. Draft Guaranty Authorization

AID 1020-28 (1-72)

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

PROJECT DESIGN SUMMARY

LOGICAL FRAMEWORK

Project Title and Number: 681-HG-003

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATIONS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>Improved shelter and related amenities for low-income urban residents.</p>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"> 1. Constantly increasing number of water outlets and sanitary facilities per capita in lower income area. 2. GOIC increases construction of community facilities designed to serve low income families. 3. More manifestations of community pride and organization, i.e., neighborhood associations, improved home and environs maintenance and independent construction projects. 	<ol style="list-style-type: none"> 1. Periodic reports from participating agencies. 2. SER/H and IBRD on site reviews 	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> 1. GOIC remains committed to concept of carrying-out shelter projects for target group. 2. Target group will accept options offered as solutions to their shelter needs. 3. GOIC ab' to find funding for future projects. 4. Completed projects will result in environmental and health improvements.
<p>Project Purpose:</p> <p>Establish and strengthen a coordinated Ivorian operation to design, implement, finance and manage replicable shelter projects for lower income families.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> 1. SETU, SICOGI, MCU & BNEC cooperate to complete HG project on schedule. 2. Above institutions prepare proposals for future low income housing projects. 3. 100% of HG assisted lots/units affordable by families below median income. 	<p>Units to be established within MCU (for upgrading and LEM projects) to gather baseline data and monitor construction, management and socio-economic developments.</p> <ol style="list-style-type: none"> 1. Periodic reports from participating agencies. 2. SER/H and IBRD on site reviews. 3. IBRD/SERH/ evaluation reports. 	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. Inflation/wage relationship remains relatively constant. 2. Lower income housing projects receive only minimal subsidies.
<p>Outputs:</p> <ol style="list-style-type: none"> 1. Establishment of Central Fiduciary for lower income housing projects with trained and strengthen staff. 2. Completed projects in <ol style="list-style-type: none"> a) Slum Upgrading b) Sites and Services c) Low income rental housing 3. Trained monitoring unit in MCU/SETU 	<p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> 1. Consolidated BNEC, staff capable of executing responsibilities. 2. <ol style="list-style-type: none"> a) ± 4,000 lots for from 110,000 to 150,000 people. b) ± 4,000 lots for from 22,000 to 44,000 people. c) ± 2,000 units for ± 10,000 people. 3. Nuclear staff of 6 professionals 	<ol style="list-style-type: none"> 1. Construction reports. 2. Participating agencies reports. 3. On-site reviews. 	<p>Assumptions for achieving outputs:</p> <ol style="list-style-type: none"> 1. GOIC accepts concept of slum upgrading as viable alternative to slum clearance. 2. GOIC will not enter into loan agreements or future high subsidy shelter programs which would siphon funds from the sector. 3. LEM residents able to finance construction of houses. 4. Rental increases in slum upgrading areas moderate so that relocation for economic reasons avoided.
<p>Inputs:</p> <ol style="list-style-type: none"> 1. HG 2. IBRD 3. TA 4. GOIC 5. Home Loans 	<p>Implementation Target (Type and Quantity)</p> <ol style="list-style-type: none"> 1. \$21 million 2. \$22 million 3. <ol style="list-style-type: none"> a) 72 man months to MCU monitoring unit and, b) 96 man months to BNEC c) HG short-term to Savings Division of BNEC. 4. \$20.8 million. 5. \$2 million from IBRD plus \$1 million from GOIC. 	<ol style="list-style-type: none"> 1. Disbursement records. 2. Participating Agency Reports. 	<p>Assumptions for providing inputs:</p> <ol style="list-style-type: none"> 1. US Investor will be found. 2. GOIC able to budget funding for its commitments. 3. Qualified/Trainable local personnel available.



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APPROVED BY AA/AFR:SSSCOTT
AFR/CWR:DSHEAR
AFR/DP:RHUESMANN (DRAFT)
PPC/DPRE:IJSHANNON (DRAFT)
AA/AFR:DBROWN
SER/H:DGARDNER (DRAFT)
SER/H:CRZENGER (INFO)
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SUBJECT: PROPOSAL FOR NEW HIG PROGRAM

1. PID FOR NEW DOLS 20 MILLION PROGRAM APPROVED BY AFR/ECPR AND SER/H AUTHORIZED TO PROCEED TO PP STAGE. ECPR IDENTIFIED FOLLOWING GUIDELINES AND ISSUES FOR CLARIFICATION DURING PROGRAM DEVELOPMENT PRECEEDING PP:

A. IN PROPOSED PROGRAM MIX, THE 50 PERCENT ALLOCATED FOR LOW INCOME RENTAL HOUSING IS NOT TO BE INCREASED.

B. HIG AUTHORIZATION FOR PROGRAM WILL BE ON BASIS OF DOLS 10 MILLION IN BOTH FY76 AND FY77.

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C. MORE DETAILED ENVIRONMENTAL STATEMENT REQUIRED.

D. CLARIFY ROLE OF IBRD AND STATUS OF ITS DOCUMENTATION/
COMMITMENT TO PARTICIPATE IN FUNDING OF PROGRAM.

E. DETAIL CONSTRUCTION STANDARDS FOR SLUM UP-GRADING AND
SITES AND SERVICES PROJECTS.

F. WHAT COMMUNITY SERVICES ARE TO BE PROVIDED AND HOW
FINANCED.

G. PROVISIONS FOR ON-SITE MANAGEMENT OF PROJECTS DURING
OCCUPANCY STAGE AND CONTINUING, FOLLOW-UP MANAGEMENT
THEREAFTER.

H. TO AMPLIFY ON ITEM D ABOVE, ECPR RECOMMENDS THAT IN
COURSE OF PROGRAM DEVELOPMENT OF PROJECT, AID AND IBRD
SHOULD CLARIFY RATIONALE FOR REORGANIZATION OF SOGEFHIA
AND CREATION OF CENTRAL FIDUCIARY; THEIR RELATIONSHIP TO
TO ONE ANOTHER IN PID UNCLEAR. INGERSOLL

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PROPOSED SITES AND PROJECT COSTS

I. Slum Upgrading

1. Abobo Gare

- a) Characteristics: 112.5 ha
1200 lots, average 500 M2
population: present 45,000, 8,100 families
 · potential 71,000
density : present 400 pers/ha
 potential to 650 pers/ha

The site is adjacent to the recently completed SOGEFIHA project (of which one half was financed as part of the second HG program) and to a 40 ha area reserved to SETU for sites and services. Abobo Gare itself is a growth center of the city of Abidjan, located \pm 12 km to the north and well connected with a railway and a new express way under construction. Present population is estimated at 140,000, and it is expected to grow to 270,000 by 1985.

b) Improvements and Preliminary Cost Estimates

Infrastructure	(CFAF Million as of 6/76)	
	<u>Primary</u>	<u>Secondary & Tertiary</u>
Fill		64
Roads	70	354
Drainage	180	497
Water		126
Sewage	76	181
Electricity	—	<u>14</u>
S/T Contingencies	376	1,218
S/T Infrastructure	<u>144</u>	<u>532</u>
	470	1,750
		2,220
Community Facilities		
Elementary Schools	209	
(based on GOIC criteria that 12% of population is school age, 80% will attend and 45 pupils per classroom)		
3 Playgrounds	9	
1 Meeting Hall	30	
Market	100	
S/T	<u>348</u>	
Contingencies	<u>210</u>	
S/T Community Facilities		558
Overhead (Plans, specs, SETU Fee, Relocation)		<u>206</u>
Total Development Costs		CFAF 3,015 \$13.4 Million)
Cost directly attributable to individual parcels (Secondary/Tertiary Infrastructure)		
CFAF 1,750 million (\$7.8 million) Infrastructure)		CFAF 1,948 (\$8.7 million)
Cost per parcel		CFAF 1,623,000 (\$7,200)
per dwelling unit		CFAF 200,000 (\$1,070)

2. Adjame Fraternite and Nord-Est

- a) Characteristics: 41.9 ha
 580 lots, average 450 M2
 population: present 20,000 3,500 families
 potential 33,000
 density : present 474/ha
 potential 800/ha

At the northern part of the Plateau adjacent to SICOGI projects, Adjame has more pri
 Adjame has more primary and secondary infrastructure and better access to the city than any other site.

b) Improvements and Preliminary Cost Estimates

Infrastructure	(CFAP Million as of 6/76)		
	Primary	Secondary & Tertiary	
Fill		50	
Roads		221	
Drainage		158	
Water			
Sewage	4	73	
Electricity	--	<u>6</u>	
S/T	4	508	
Contingencies		<u>181</u>	
S/T Infrastructure	<u>4</u>	<u>690</u>	694
Community Facilities			
Schools	52		
Playgrounds	<u>2</u>		
S/T	<u>54</u>		
Contingencies	<u>22</u>		76
S/T Community Facility			
Overhead (Plans, Specs, SETU Fee & Relocation)			<u>47</u>
Total Development Cost			827 (\$3.7 million)
Cost directly attributable to individual parcels (Secondary/Tertiary Infrastructure)			CFAP 750 (\$3.3 million)
Cost per parcel			CFAP 1,300,000 (\$5,800)
per dwelling unit			CFAP 214,000 (\$950)

b) Improvements and Preliminary Cost Estimates

Infrastructure

(CFAF million as of 6/76)

	<u>Primary</u>	<u>Secondary & Tertiari</u>	
Fill		25	
Roads		118	
Drainage	101	71	
Water		22	
Sewage	29	45	
Electricity	<u>5</u>	<u>18</u>	
S/T	135	300	
Contingencies	<u>39</u>	<u>111</u>	
S/T Infrastructure	184	411	595
Community Facilities			
Schools	36		
Community Center	<u>16</u>		
S/T	52		
Contingencies	15		
S/T Community Facilities			67
Overhead (Plans, Specs, SFTU Fees, Relocation)			<u>64</u>
Total Development Cost			726 (\$3.2 million)
Cost directly attributable to individual parcels (Secondary/Tertiary infrastructure)			450 (\$2.0 million)
Cost per parcel			CFAF 9,070,000 (\$4,755)
per dwelling unit			CFAF 237,000 (\$1,050)

4. Port Bouet II

a) <u>Characteristics:</u>	40 ha	
	1400 lots, average 150 m ²	
population:	present 12,000	2,900 families
	potential 24,000	
density :	present 300/ha	
	potential 600/ha	

This is a relocation area of small lots, virtually without infrastructure, where lots were distributed, presumably only provisionally, to relocate from a slum clearance project in Port-Bouet. Port-Bouet II is nowhere near its namesake, being located West of the central part of the city on the 5,000 ha Banco Plateau, which is with Abobo Gare, the major suburban growth center for Abidjan. Aside from scattered settlements, urban development of the Banco began with a SICOGI project in 1972, and since that time SICOGI and SOGEFIHA have built 10,200 economic housing units. The area's population is projected to total 620,000 when fully developed during the 1980s.

b) Improvements and Preliminary Cost Estimates

Infrastructure

(CFA million as of 6/76)

	<u>Primary</u>	<u>Secondary & Tertiary</u>	
Fill		34	
Roads		131	
Drainage	76	114	
Water		45	
Sewage		109	
Electricity	<u>33</u>	<u>41</u>	
S/T	109	474	
Contingencies	<u>57</u>	<u>253</u>	
S/T Infrastructure	166	727	893
Community Facilities			
Primary Schools		72	
Health Center		29	
Market		15	
Playground		<u>4</u>	
S/T		120	
Contingencies		<u>71</u>	
S/T Community Facilities			191
Overhead (Plans, Specs, SETU Fees)			<u>60</u>
Total Development Cost		CFAF	1,144 (\$5.1 million)
Cost directly attributable to individual parcels (Secondary/Tertiary infrastructure)		CFAF	787 (\$3.5 million)
Cost per parcel		CFAF	562,000 (\$2,500)
per dwelling unit		CFAF	271,500 (\$1,200)

5. San Pedro-Bardo

a) Characteristics:	60 ha	
	1400 lots	
population:	present	15,000, 5,800 families
	potential	21,000
density :	present	250
	potential	350

The San Pedro-Bardo proposal would involve upgrading of 60 ha of squatter settlements located about 4 km from the center of the new port town. The Bardo does not have even the skeleton infrastructure that the Abidjan areas have, nor does it have the regular layout of the registered areas of Abidjan. The French AID, CCCE, has agreed to finance an experimental first phase upgrading program in the Bardo.

b) Improvements and Preliminary Cost Estimates

(CFA million as of 6/72)

Secondary
& Tertiary

Infrastructure		
Fill & Roads	381	
Drainage	204	
Water	81	
Sewage	238	
Electricity	181	
Connections	100	
S/T	<u>1,184</u>	
Contingencies	521	
S/T Infrastructure		1,705
Community Facilities		
Primary Schools	68	
Markets	15	
Playgrounds	3	
Community Center	15	
S/T	<u>102</u>	
Contingencies	41	
S/T Community Facilities		153
Overhead (Plans, Specs, ARSO Fees)		<u>186</u>
Total Development Costs		CFAF 2,044 (\$9.1 million)
Cost directly attributable to individual parcels (Secondary/ Tertiary infrastructure)		CFAF 1,891 (\$8.4 million)
Cost per parcel		CFAF 1,350,000 (\$6,000)
per dwelling unit		CFAF 326,000 (\$1,500)

Cost and Financial Summary

	(CFA million)	(\$ million)
Abobo Gare	3,015	\$13.4
Adjame	827	3.7
Pelieuville	726	3.2
Port Bouet II	1,144	5.1
San Pedro-Bardo	<u>2,044</u>	<u>9.1</u>
	7,756	\$34.5
(of which secondary/tertiary)	(5,826)	(\$25.9)
Financing Sources	(\$ million)	
GOIC	12.9	
IBRD	14.1	
HIG	<u>7.5</u>	
Total	34.5	

II. Sites and Services

1. Abobo Gare

a) Site

In conjunction with its slum upgrading project nearby SETU will develop 35 ha of sites and services lots. 16 ha, or 900 lots will be of the 120 M2 LEM type while 9 ha or 380 lots will be BNEFD/BCEOM types ranging from 128 - 200 M2.

b) Improvements and Preliminary Cost Estimate (CFAF Million as of 6/76)

Secondary/Tertiary Infrastructure (CFAF Million as of 7/76)

Fill, Roads	219	
Drainage	60	
Water	40	
Sewage	78	
S/T	<u>398</u>	
Contingencies	<u>157</u>	
S/T Infrastructure		555

Community Facilities

Primary Schools	104	
Health Units	110	
Market	15	
Playgrounds	3	
S/T	<u>232</u>	
Contingencies	<u>118</u>	
S/T Community Facilities		350

Overhead (Plans, Specs., SETU fees, relocation) 102

Total Development Cost CFAF 1008 (\$1.5 million)
 Cost per parcel (infrastructure) CF 486,000 (\$2,150)

2. Koumassi Nord-Est

SETU is also developing 70 ha as part of an integrated 150 ha development on the perimeter of Koumassi. Because of its central location near employment it is a very desirable location. Up to now the site has

been left undeveloped because of a drainage problem.

The proposed 150 ha site will be developed with approximately 2,500 smaller lots (125-200 M2) and about 200 lots "evolutifs" of 375 M2 suitable for mixed residential/artisanal-commercial use, and 19 ha for low-income housing. A part of this site will be also developed with 215 serviced residential sites of 885 M2 which will be sold at market prices, thus providing for a cross subsidy to the smaller, lower-income lots. Although the residential lots represent an integral part of the financing plan, they will not be financed by AID.

Improvements & Preliminary Cost Estimates

Secondary/Tertiary	(CFA million as of 6/76)	
Infrastructure	438	
Fill & Roads	438	
Drainage	119	
Water	80	
Sewage	115	
Electricity	95	
S/T	887	
Contingencies	<u>311</u>	
S/T Infrastructure		1198
Community Facilities		
Primary Schools	209	
Health Centers	110	
Playgrounds	12	
Markets	50	
Community Center	30	
S/T	412	
Contingencies	<u>240</u>	
S/T		<u>660</u> 1858
Overhead (Plans, Specs, SETU Fees & Relocation)		192
Total Development Costs		2050 (\$9.1 million)
Sales Price Per Parcel (after cross-subsidy)		
Low-income		253,440-396,000 (\$1,126-1740)
Evolutifs (artisanal)		742,500 (\$3,300)

Cost and Financial Summary

	(CFA 000)	(\$ million)
Abobo Gare	1008	4.5
Koumassi	<u>2050</u>	<u>9.1</u>
	3058	13.6
<u>Financing Sources</u>	(\$ 000)	
GOIC	5.2	
IBRD	5.9	
HG	<u>2.5</u>	
TOTAL	13.6	

III. Very Economic Rental Unitsa. Marcory East

This site is located about 7 km from the center of town, bordered by paved streets, within easy access of existing public transportation. The project site is the last segment of a general development in the Marcory and Koumassi neighborhoods, where more than 5,000 economic and super-economic housing units renting at from CFAF 4,500 to 18,000 a month have been built on fill, primarily by SICOGI, since 1970. Previous to this time, despite its excellent location, this area was considered unbuildable, because subject to flooding. Using OSHE funds to provide fill and infrastructure, GOIC has made possible construction of low-income housing in this area. Hydraulic fill for the balance of

this site, which is owned by SICOGI, is currently under way, to be financed by GOIC as primary infrastructure in order to make available building sites convenient to employment for low-income families. About 500 units of economic and super-economic housing will be built by SICOGI under financing already committed by OSIE (infra-structure) and the French aid fiduciary, CCCE. These units range in size from 25 m² to 32.5 m² and will rent for from CFAF 5,500 to 21,000.

The balance of the site to be financed under the HC program will contain only super-economic units, about 766 two, three and four room units of from 28.8 m² to 49.4 m², renting initially at from CFAF 5,900 to 10,340. In this portion of the project, the rental payments will amortize both the housing units and the infrastructure, in accordance with AID/IBRD policy, whereas all previous units were built with infrastructure contributed by GOIC (through OSIE). Primary infrastructure will continue to be provided by GOIC.

The site design is simple. Vehicular access is by peripheral paved roads and one bisecting the site. Access to most units by pedestrian walkways. Parking bays are provided at a ratio of one space to each three housing units.

Six additional school rooms are planned on site, which will supplement existing schools in the adjacent neighborhood. Commercial facilities are abundant in the adjacent neighborhood, and no additional market is required.

The units will be one-story row houses of concrete block construction, with neither interior plastering nor ceilings, and with one electric panel containing switch, light socket and plug per room. Each unit has an interior court. A sanitary block consisting of water tap and combination Turkish WC/shower is at the rear of the court.

Estimated cost of the units is as follows:

Unit type	<u>2 SL</u>	<u>3N</u>	<u>3 BB</u>	<u>4 SL</u>
Size (M ²)	28.8	34.0	36.5	49.4
Construction Cost (incl. overhead)	54,000	595,000	631,450	814,740
10% inflation	<u>50,400</u>	<u>59,500</u>	<u>63,145</u>	<u>84,474</u>
S/T unit	554,400	654,500	694,600	929,215
Infrastructure	<u>282,200</u>	<u>338,640</u>	<u>366,860</u>	<u>469,740</u>
Total unit cost	836,600	993,140	1,061,460	1,408,955

Total cost of the project is estimated as follows:

<u>Unit</u>	<u>No</u>	<u>Unit Cost</u>	<u>Total Cost</u>
2 SL	70	836,600	58,562,000
3 N	140	993,140	139,039,600
3 BB	416	1,061,460	441,567,360
4 SL	140	1,408,955	<u>197,253,700</u>
			836,422,660
			(3,717,500)
Primary infrastructure by GOIC			<u><u>184,000,000</u></u>

CFAP 1,020,422,660

b) Koumassi North-East

The site consists of about 19 ha integrated into SETU's 150 ha development about 1 km from the existing Koumassi neighborhood. Site and infrastructure will be developed by SETU and transferred at cost to SICOI. Preliminary plans indicate development by SICOI comparable to its other projects, with super-economic units at densities of \pm 60 units per ha.

Assuming for purposes of preliminary cost calculations a unit mix and density comparable to that of Marcory East, preliminary cost estimates are as follows:

<u>Unit type</u>	<u>2 SL</u>	<u>3 BB</u>	<u>3 N</u>	<u>4 SL</u>
Size	28.8 112	36.5 112	34.0 112	49.4
Construction Cost	554,400	694,600	654,500	922,215
Infrastructure	181,825	233,775	212,995	311,700
Total unit cost	<u>736,225</u>	<u>928,375</u>	<u>867,495</u>	<u>1,240,915</u>

Total Cost of the project is estimated as follows:

<u>Unit</u>	<u>No.</u>	<u>Unit Cost</u>	<u>Total Cost</u>
2 SL	100	736,225	73,622,500
3 N	220	867,495	190,848,900
3 BB	600	928,375	557,025,000
4 SL	180	1,240,915	223,364,700
			<u>1,044,861,100</u>
			(<u>4,643,800</u>)

Total cost:

Marcory East	§ 3.7 million
Koumassi North East	<u>4.6</u>
	§ 8.4 million

SICOGI also has requested funding for 200 super-economic units in Bouake, the country's second city. This and other possible programs will be considered within the financial and policy limits of the authorization.

c) Cost Recovery

As a part of an overall policy development to reinforce financial planning for the Shelter Sector, COIC has agreed to eliminate the infrastructure subsidy for its low-income economic projects and to recover their full economic cost from their renters.

In order to achieve this objective while still pricing the units within the reach of the target group, monthly payments will be calculated on the following basis:

- Amortization of house construction at an overall rate equivalent to the HG loan (30 years with 5 years grace at, say, 9.75%). Payments will be on a regularly escalating basis, so that initial payments can be within the reach of the target income group and the escalation does not exceed an annual rate of increase of 3%.

- An annual maintenance and management charge equivalent to 2% of the cost of building construction.

- Amortization of infrastructure at a rate of 40 years with a five year grace period at the HG interest rate (say 9.75%)

Roll-over credits necessary to cover payments due on the HG loan because of the system of escalating payments on home construction and lengthened amortization for infrastructure will be provided by BNEC from ex-OSHE funds, in accordance with GOIC policy.

The following preliminary monthly payment calculations are based on discussions with BNEC and SIOGCI and will be refined in the course of project development.

Preliminary Monthly Payment Schedules: Marcor, East

<u>2 SL</u>	<u>Cost</u>	<u>Years 1-5</u>	<u>Monthly Payments</u>		... etc
			<u>6 - 10</u>	<u>11-15</u>	
House	554,000	4514	3271	4371	
Maint. (3 /year)		1386	1386	1386	
Infra.	<u>252,200</u>	<u>--</u>	<u>2343</u>	<u>2343</u>	
	836,600	5900	7000	8100	... etc
<u>3 II</u>					
House	654,500	5264	3754	5104	... etc
Maint.	--	11636	1636	1636	
Infra.	<u>332,640</u>	<u>--</u>	<u>2810</u>	<u>2810</u>	
	993,140	6900	8200	9550	... etc
<u>3 BB</u>					
House	694,600	5663	4018	5418	... etc
Maint.	--	1737	1737	1737	
Infra.	<u>366,860</u>	<u>--</u>	<u>3045</u>	<u>3045</u>	
	1,061,460	7400	8800	10,200	... etc
<u>4 SL</u>					
House	929,215	8000	5978	7,978	... etc
Maint.	--	2340	2340	2,340	
Infra.	<u>479,740</u>	<u>--</u>	<u>3982</u>	<u>3,982</u>	
	1,408,955	10,340	12,300	14,300	... etc

These payments are within the means of persons now making CFAF 23,600 to 41,400 or from 55 to 80% of the population in Abidjan.

Cost of the Koumassi North-East units are CFAF 100,000 to 160,000 less than those of Marcory, because of lower infrastructure costs, thereby permitting either a more rapid recovery through escalation or the possibility of cross-subsidy between the two projects, which being located in close proximity should probably be comparably priced.

Being and services lots will be of two kinds: the 100 type (100 m² plot) which is presently built by the BPTD/BCEOM in the high production of 5 ha each lot, and the 125 type (125 m² plot); and the 150 type (150 m² plot) which has been designed by the consultants.

(5) 100 (One map No. 100)

Lot options provided for the project are as follows:

100 m ²	8 m x 12.5 m	} 2,700 lots
125 m ²	8 m x 15.6 m	
150 m ²	8 m x 18.7 m	

Only 30% of the lots have a direct access to vehicle track, the others will have a pedestrian walkways access. This is satisfactory since these lots are for the lowest income group of the target population of the project.

Both roads and pedestrian walkways will be V-shaped and serve as storm water drainage collectors.

(11) BPTD/BCEOM types

Lot options provided in the project are the following:

type U ₁ :	200 m ² (10 m x 20 m) = 500 lots
type T ₁ :	196 m ² (8 m x 24 m) = 500 lots
type Y ₂ :	128 m ² (8 m x 16 m) = 500 lots

All lots will have direct access to roads suitable for motorvehicles except the Y₂ type ones, the smallest, which are arranged around small public places.

3. Since the LEM experiment has shown that people could build their own sanitary core unit for half the contractor built price, each lot in the sites and services area will be provided with minimum lot services consisting of a sewerage connection only. For their houses, people will choose either a standard plan among 20 types being offered, or develop their own plan, in which case they will have to get a building permit. This arrangement will provide the owners/leaseholders with the possibility of building the type of house they really desire and can afford.

Internal Roads and Pedestrian Facilities

4. Both upgraded area and sites and services will be provided with a hierarchy of circulation pattern from pedestrian walkways to roads carrying a reasonable proportion of vehicles especially buses and trucks for garbage collection.

Streets will have a right-of-way varying from 10 m to 30 m with a carriageway from 6 m to 10.5 m, with two sidewalks of 2 or 2.7 m.

Due to the heavy rainfalls and the poor quality of the soil, erosion has been very important in the slum upgrading areas and important fill-ups and regravelling will be necessary. The steeper the slope the greater the erosion and the more important the earthworks, mainly fills, up to 50 cm thick for slopes over 2%.

The laterite base will be 0.25 m thick covered with a double surface treatment for the carriage way. The remaining right-of-way will not be surfaced but only gravelled.

Only roads necessary for the public transports and garbage collection vehicles will be bituminized. Whenever the slope is too steep on non-surfaced roads, a V-shaped bituminized walkway of 2 m width will be provided with steps and water breaks. It will also serve to collect drainage water and thus prevent erosion.

Water Supply

5. The project will provide secondary and tertiary water distribution systems in the project areas, which are not yet served. Only Port Bouët II will need reinforcement of the primary feeder, which will be constructed in 1977-78 and financed out of the water supply company resources.

The secondary and tertiary distribution system will follow the existing road layout. Pipes are locally manufactured plastic (PVC) pipes in diameters from ϕ 53/63 to ϕ 143.2/160. A ϕ 53/63 diameter pipe is assumed to be able to serve 60 house connections. The cost of a house connection of ϕ 15 mm, including the water meter, amounts to CFAF 7,000-10,000 (US\$30-45) including costs of a faucet connection at the edge of the lot. This cost is subsidized by the Fond National^{d'} Hydraulique Humaine (FNH). The water tariffs are currently CFAF 74/m³ for the first 5m³/month of consumption and CFAF 108.5/m³ thereafter.

Surface Water Drainage

6. Because Abidjan has torrential rainfall, storm water drainage is expensive. In the cases where insufficient attention is given to proper design of the street layout and the drainage system, damage can be extensive. For the flat areas as Koumassi the damage is caused by flooding and in the areas with large slopes as Pellicuville by erosion.

Storm water drainage for Abidjan is handled by a combination of open ditches and a sub-surface piped network. The design is based on a 5-year storm frequency for the drainage network in general, while keeping a 20-25 years storm frequency for critical works, as bridges etc. The runoff coefficients vary according to slope, surface and sub-surface conditions, from .95 for paved streets with slopes over 6% to .35 for non-paved streets with slopes 0-5% and 0.10 for gardens.

Sewerage

7. The project will include a complete secondary and tertiary sewerage disposal system. In addition, the Abobo and Koumassi areas will need construction of trunk sewers, while Adjamé will be served by the East Plateau sewer, which will be constructed in 1977-78 under the Bank's financed Abidjan Sewerage and Drainage project. The Port Bouët II sewerage system will be connected to the existing trunk sewer of the Banco Industrial zone. Pelieuville is situated on the West side of the Plateau area, for which the construction of a trunk sewer is only planned for the early or mid-eighties. Therefore as a temporary measure the Pelieuville primary sewer will end at the Banco Lagoon.

8. The minimum size of a tertiary sewer line is ϕ 200, with a minimum slope of 5%, while the house connections are made of ϕ 100 pipe with a minimum slope of 3%. This minimum size has been decided on for the whole of the Abidjan system, because of the experience of the sewerage system operator SODECI, which has had major problems in the maintenances of ϕ 150 mm laterals. At present all sewer pipes up to a diameter of ϕ 300 are made of PVC. The pipes will be laid, under the side walks where this is feasible. Concrete manholes will be constructed at an average distance of 50 m, to which the house connections are connected. The designs for the project are based on a per capita water consumption of 75-100 l/day with an 80% return to the sewerage system and peak flow factor of about 2. An infiltration allowance of 0.20 l/s/ha has also been made. The pipes are dimensioned so that they are filled for 80% at peakflow.

Electricity and Street Lighting

9. Except for Port Bouet II, Pelieuville and Bardo, the areas to be upgraded have already a medium voltage power grid and about 60% of the lots are connected. In Port Bouet II, EECI will install the medium and low-voltage power grid. Cost estimates include the lines and civil works for the transformers. The transformers themselves will be supplied and paid for by EECI and are not included in the project. In Pelieuville, cost estimates include the upgrading and extension of the power grid (new lines and some new poles). For the sites and services areas, EECI will construct the medium and low voltage power grid. For the transformers, the same arrangement has been adopted. Each lot will be provided with a metered connection upon request.

Primary Schools

10. In agreement with the Planning Department of the Ministry of Education, the computation of the primary school facilities are based on the following assumptions:

- (a) school age population (7 - 12 years): 11% of total population
- (b) - Scholarization rate: 80% of (a)
- (c) repeating or over-aged pupils: 10% of (b)
- (d) private school: 22% of (a) + (b)
- (e) maximum number of pupils per class: 45

These numbers have to be rounded up since the smallest school presented under the project is 12 classrooms.

11. Cost estimates are based on December 1975 prices for similar construction by contractors. Building specifications are similar to those of existing low-cost primary schools recently built in the Abidjan area which are adequately adapted to local conditions and require very little maintenance. Specifications are the following:

- reinforced concrete foundation;
- wall of concrete block, plastered only externally;
- transversal ventilation ensured by concrete clautra on one side and wooden louvers on the other;
- wooden doors;
- concrete floors;
- aluminium roofs on timber framing;
- plywood ceilings.

The cost of furniture and equipment was estimated to be about 15% of the total cost.

Health Centers:

12. There will be three types of facilities provided:

- Dispensary of 450 m²;
- Maternity of 665 m² including a 30 bed ward;
- PMI/MCH (Protection Maternelle et Infantile) of 525 m².

There are standard plans for all these facilities which are well adapted to local conditions.

Cost Health Centers
(CFAF million)

	<u>Building</u>	<u>Equipment</u>
Maternity	35	5
PMI	22	4
Dispensary	25	5

Market Facilities

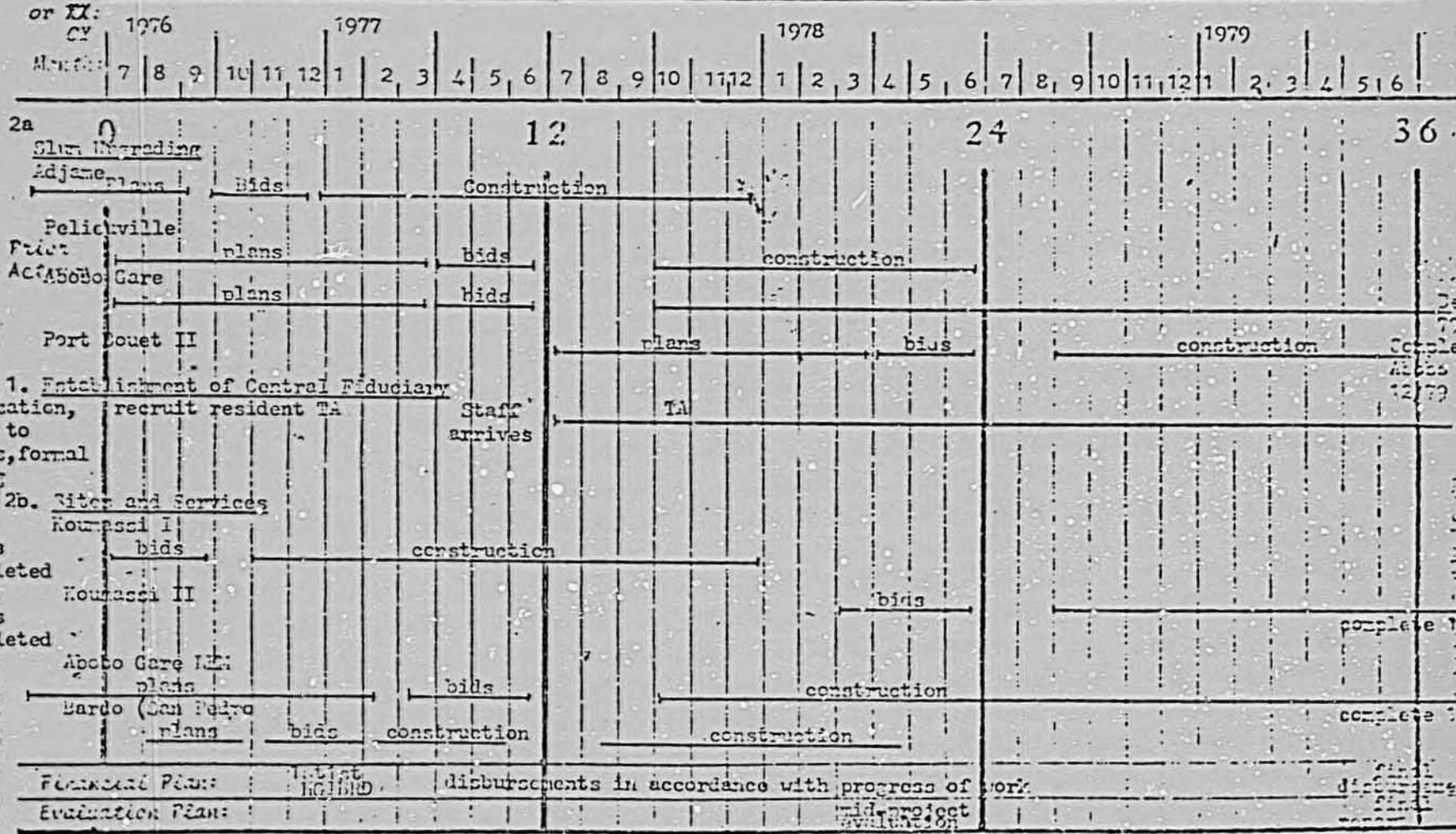
13. Market facilities will consist of very simple covered structures on a concrete floor, estimated at CFAF 15.000/m². The following facilities are included in the project.

<u>Sites</u>	<u>Covered Area</u>	<u>Cost</u> <u>(CFAF million)</u>
Abobo Gare	6500m ²	100
Port Bouet II	1000m ²	15
Le Bardo	1000m ²	15
Koumassi N.E.	3200m ²	50
Abobo Nord	1000m ²	15
	<hr/>	<hr/>
TOTAL:	12.700m ²	195
	<hr/>	<hr/>

Drainage, water supply, public toilets and special garbage collection are included in the project.

APPENDIX VI

Country: Iv. Coast	Project No:	Project Title: Urban Sector Project	Date:	Prepared By:	FPT No.:
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PROJECT PERFORMANCE NETWORK

BEST AVAILABLE DOCUMENT

Country:	Project No:	Project Title:	Date:	/ Create to / Reviser #	FT. com
or II: 1976	1977	1978	1979		
Mo. G1:	7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6	
2c Low Income Rental Housing		12	24		3
Marcory fill	site plan bids	construction			
Kourassi	plans	bids	construction		
Prior Actions house plans for both sites	II- plans	bids	construction		
3 TA to MCO Recruit	Staff arrives				
Financial Plan:					
Evaluation Plan:					

STATUTORY CHECK LIST

Section 221:

The total face amount of guaranties issued, outstanding at any one time, shall not exceed \$430,000,000.

The proposed guaranty will finance self-liquidating housing projects and related community facilities suitable for conditions in the Ivory Coast.

Section 222(b):

The proposed guaranty qualifies under the criteria of one or more of the following subsections of Section 222(b) in that it assures against loss of loan investment in:

222(b)(1). Private housing projects of types similar to those insured by the Department of Housing and Urban Development and suitable for conditions in the Ivory Coast;

222(b)(3). Housing projects in the Ivory Coast for lower income families and persons which projects shall be constructed in accordance with maximum unit costs established for families and persons whose incomes meet prescribed limitations;

Section 223(a):

The AID guaranty fee has been determined by AID in accordance with the authority delegated by the President.

Section 223(f):

The maximum rate of interest allowable to the eligible U.S. investor to be prescribed will not be more than one percent above the current rate of interest applicable to housing mortgages insured by the Department of Housing and Urban Development.

Section 223(h):

No payment may be made under any guaranty issued for any loss arising out of fraud or misrepresentation for which the party seeking payment is responsible.

Section 223(j):

The proposed guaranty qualifies under Subsections 223(j) (1), (2) and (3) in that the Ivory Coast is currently receiving development assistance under Chapter 1 of Part I of the FAA, and the proposed housing projects are and will be coordinated with and complementary to such assistance and are specifically designed to demonstrate the feasibility and suitability of slum upgrading, sites and services, low income rental housing, and new institutional arrangements in the Ivory Coast.

The project is designed and planned by AID so that at least ninety percent (90%) of the face value of the proposed guaranty will be issued for housing suitable for families with incomes below the median income (below the urban median income for the housing in urban areas) in the Ivory Coast.

Of the total \$21 million proposed guaranty, \$10.5 million will be authorized in the fiscal year in which this project is approved and \$10.5 million will be authorized in the subsequent fiscal year. The face value of guaranties issued (i.e. authorized) with respect to housing in the Ivory Coast shall not exceed \$25 million in any fiscal year. It is planned that the average face value of all housing guaranties issued (i.e. authorized) in any fiscal year shall not exceed \$15 million.

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

GUARANTY AUTHORIZATION

Provided From: Housing Investment Guaranty

IVORY COAST: Republic of the Ivory Coast

Pursuant to the authority vested in the Assistant Administrator, Bureau for Africa, by the Foreign Assistance Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance of guaranties pursuant to Section 221 of the FAA of not to exceed ten and one half million dollars (\$10,500,000) in face amount, assuring against losses (of not to exceed one hundred per centum (100%) of loan investment and interest) with respect to loans by eligible U.S. investors (Investor) acceptable to A.I.D. made to finance housing projects in the Ivory Coast.

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

1. Term of Guaranty: The loan shall extend for a period of up to thirty years (30) from the date of disbursement of the first installment of the loans including a grace period on the repayment of principal not to exceed ten (10) years. The guaranty of the loan shall extend for a period beginning with the first disbursement of the loan and shall continue until such time as the Investor has been paid in full pursuant to the terms of the loan.

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

3. Republic of the Ivory Coast Guaranty:

The Republic of the Ivory Coast shall provide for a full faith and credit guaranty to A.I.D. in United States dollars assuring against any and all losses to A.I.D. by virtue of A.I.D.'s guaranty to the Investor or from non-payment of the guaranty fee.

4. Fee: The fee of the United States shall be payable in dollars and shall be one-half of one per centum (1/2%) per annum of the outstanding guaranteed amount of the loan plus the fixed amount of \$100,000 to be paid as A.I.D. may determine upon disbursement of the loan.

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

Assistant Administrator
Bureau for Africa

Date