

AGENCY FOR INTERNATIONAL DEVELOPMENT  
**PROJECT DATA SHEET**

1. TRANSACTION CODE 150-30574 DOCUMENT CODE 3  
 A = Add  
 C = Change  
 D = Delete  
 Amendment Number 2\*

2. COUNTRY/ENTITY TUNISIA

3. PROJECT NUMBER 664-HG-004

4. BUREAU/OFFICE NEAR EAST 03

5. PROJECT TITLE (maximum 40 characters) TUNISIA LOW-COST SHELTER PROJECT

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)  
 MM DD YY  
1 | 2 | 3 | 0 | 9 | 0

7. ESTIMATED DATE OF OBLIGATION (Guaranty Authority) this amendment  
 A. Initial FY 84 B. Quarter 4 C. Final FY 84

8. COSTS (\$000 OR EQUIVALENT \$1 = TD 1.4)

A. FUNDING SOURCE (this amendment)	FIRST FY <u>84</u>			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	( )	( )	( )	( )	( )	( )
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S.						
1. HOUSING GUARANTY (HG)	500	5,200	5,700	2,000	44,000	46,000
2.						
Host Country GOT & BENEFICIARIES	1,500	6,100	7,600	7,000	43,000	50,000
Other Donor(s) IBRD - KDF	5,700	-	5,700	48,000	-	48,000
TOTALS	7,700	11,300	19,000	57,000	87,000	144,000

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. Authorization TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) HG-1	723		862		4,000				4,000
(2) HG-2	723		862		21,000		25,000		46,000
(3) ESF	930	863		1,750				1,750	
(4)									
TOTALS				1,750	25,000		25,000	1,750	50,000

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

11. SECONDARY PURPOSE CODE 723

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)  
 A. Code BU  
 B. Amount 50,000

13. PROJECT PURPOSE (maximum 480 characters)

The project objectives are to encourage more rational development of urban land and services, to encourage owner-built rather than government-built housing, and to improve living conditions in previously built-up low-income neighborhoods.

14. SCHEDULED EVALUATIONS  
 Interim MM YY 0 | 9 | 8 | 6 Final MM YY 0 | 9 | 9 | 0

15. SOURCE/ORIGIN OF GOODS AND SERVICES AS SPECIFIED UNDER "IG PROGRAM" IN IBRD & KDF PROJECTS  
 000  941  Local  Other (Specify) PROJECTS

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a 68 page PP Amendment.)  
 Increase authorization from \$25 million to \$50 million and amend to include upgrading of sanitation in secondary towns and Greater Tunis.

Amendment No. 1 (\$4,000 HG and \$1,750 ESF) described in separate document 664-0329.

17. APPROVED BY  
 Signature \_\_\_\_\_  
 Title Director, USAID/Tunisia  
 Date Signed MM DD YY 0 | 7 | 2 | 0 | 8 | 4

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION  
 MM DD YY 0 | 7 | 2 | 3 | 8 | 4

GLOSSARY

MOP	The Ministry of Plan
MOE	The Ministry of Equipment
ONAS	The National Sewerage Agency (office National de l'Assainissement)
AFH	The Land Development Agency (Agence Foncière d'Habitation)
CNEL	The National Home-Savings Bank (Caisse Nationale d'Epargne -Logement
SONEDE	The National Water Authority (Société Nationale D'Exploitation et de Distribution des Eaux)
IBRD	The International Bank for Reconstruction and Development
KDF	The Kuwaiti Development Fund (The Kuwaiti Fund for Arab Economic Development)
FY	Fiscal Year
ESF	Economic Support Funds
HG	Housing Guarantee Program
GOI	Government of Tunisia
AID	Agency for International Development
FOPRCLCS	Fonds de Promotion de Logements aux Salariés
CPSCCL	Caisse de Prêts et de Soutiens aux Collectivités Locales
PIA	Project Implementation Agreement
Boîte de Branchement	Connection box

LIST OF TABLES

- 1 Sites and Services Program
- 2 Geographic Distribution of Thirty Cities Project Sites
- 3 Summary Cost Estimate and Financial Plan
- 4 Costing of Project Outputs/Inputs
- 5 Estimated Program Expenditures by Fiscal Year
- 6 Estimated Schedule of the Disbursement of HG Funds
- 7 Greater Tunis and Thirty Cities Projects
- 8 Sites and Services Implementation
- 9 Construction Elements of Overall Greater Tunis Project
- 10 Disbursement of CNEL Loans
- 11 Affordability Analysis for CNEL Loans
- 12 Actual and Projected Average Tariff Rates
- 13 Current ONAS Tariff Rates
- 14 Urban Income Distribution

TABLE OF CONTENTS

	Page
i. Project Paper Face Sheet	
ii. Glossary of Terms	
iii. List of Tables	
iv. Table of Contents	
I. <u>RECOMMENDATIONS AND SUMMARY</u>	
A. Recommendation	1
B. Program Components	1
C. Borrower	1
D. Project Financing and Loan Terms	1
E. Project Goals and Purposes	1
F. Brief Project Description	2
G. Project Design Team	3
H. PRE/H Review Committee	3
I. USAID/Tunis Senior Program Review Committee	3
II. <u>PROJECT BACKGROUND AND DETAILED DESCRIPTION</u>	4
A. Project Background	4
B. Project Rationale	5
1. Urbanization in Tunisia	5
2. Shelter Trends	5
3. Provision of Services	6
4. Constraints	6
C. GOT Shelter Sector Policy	7
D. Other Donors	8
1. Co-Financing	8
2. IBRD Activities	8
3. KDF Activities	9
E. Detailed Project Description	9
III. <u>PROGRAM COST ESTIMATE AND FINANCING PLAN</u>	17
A. Sites and Services Subproject	17
B. Urban Upgrading Sanitation Subproject	17
1. Thirty Cities	17
2. Greater Tunis	20
C. HG Disbursements	22
IV. <u>IMPLEMENTATION AND MONITORING PLAN</u>	23
A. Responsibilities of the Major Institutions	23
B. Procurement/Contracting Plan	25
C. Project Implementation	25
D. Monitoring Plan	28

	Page
V. <u>SUMMARY OF PROJECT ANALYSIS</u>	29
A. Technical Analysis	29
B. Financial Analysis	34
C. Economic Analysis	42
D. Social Soundness Analysis	44
E. Administrative Analysis	50
F. Environmental Analysis	56
VI. <u>CONDITIONS AND COVENENTS</u>	61
VII. <u>EVALUATION PLAN</u>	62
<u>ANNEXES</u>	
A. GOT Request	
B. Project Authorization	
C. Statutory Checklist for the Housing Guaranty Program	
D. N.E. Bureau Approval Cables and Memos	
E. LCG Frame	
F. Project Tables	
G. Project Analysis	
a. Economic Analysis	
b. Financial Analysis	
c. Environmental Analysis	
d. Technical Analysis (Upgrading Program)	
e. Technical Analysis (Sites and Services Program)	
H. Methodology of Identifying the Sites Eligible for Housing Guaranty Financing.	
I. Implementation Schedule	
J. Administrative (Organization) Charts	
K. Maps	
L. Terms of Reference for the Project Paper Technical Team	
M. IBRD - 3rd Urban Sewerage Project	
World Bank Report - 30 Cities Project	
N. KDF - Kuwaiti Development Fund - Greater Tunis Project	

I. RECOMMENDATION AND SUMMARY:

A. Recommendation; That, subject to the terms and conditions of the Project Authorization (Annex B) an amendment of the \$50 million Tunisia Housing Guaranty (HG) Program Project 664-HG-004 be approved as herein described.

B. Program Components;

1. Approximately \$14 million will be provided for the Sites and Services/Owner built Core Housing Subproject, as herein described.

2. Approximately \$32 million will be provided for the Urban Upgrading Subproject, as herein described (i.e. \$8 million for the Greater Tunis Program and \$24 million for the Thirty Cities Program).

3. Approximately \$100,000 from the Private Sector Development and Technology Transfer Project 664-0328 will be used to finance technical advisory services to assist the GOT's efforts to study and develop recommendations to address issues related to urban land use and infrastructure delivery.

4. A \$4 million HG loan combined with an Economic Support Fund (ESF) grant was previously authorized and is separately described in the Emergency Housing Repair and Reconstruction Project 664-0329.

C. Borrower; The Ministry of Plan (MOP) of the Government of Tunisia (GOT) will borrow funds from U.S. capital markets.

D. Project Financing and Loan Terms; The total cost of the entire GOT program is estimated to be \$144 million. HG Guaranties will secure GOT loans of up to \$46 million from U.S. Capital Markets at interest rates based on market conditions at the time of borrowing and with repayment terms of up to 30 years.

The International Bank for Reconstruction and Development (IBRD) and the Kuwait Development Fund (KFD) will provide loans of up to \$34 million and \$14 million respectively at the current terms and conditions of those institutions.

The Government of Tunisia and the target beneficiaries will provide a contribution to the cost of the Project of approximately \$50 million.

E. Project Goals and Purposes; The Project goals are to encourage more rational development of urban land, services and owner-built housing units, and to improve living conditions in previously built up low-income neighborhoods. These goals will be achieved through the following project purposes:

1. Sites and Services Subproject;

a) to expand the availability of serviced housing sites which are affordable by that portion of the Tunisian population which is at or below the National Urban Median Income Level, and to finance owner-built housing on these serviced sites.

b) to increase the availability of mortgage credit for the purchase of serviced housing sites and for the construction of housing units by the target low-income beneficiary population.

2. Urban Upgrading Sanitation Subproject; to upgrade and expand sanitary sewerage and drainage in selected low-income urban slum neighborhoods and secondary towns.

3. Technical Assistance Subproject; to improve the capacity of GOT urban shelter land and services agencies and municipalities to plan for and prioritize investment in urban land development and services.

F. Brief Project Description;

1. Rationale; In recent years Tunisia has experienced a rapid increase in the rate of urban population growth. This growth has placed a strain on the available and planned serviced land and sanitation infrastructure in Tunis and in a majority of the secondary cities around the country. Being aware of this fact and the social, economic and environmental consequences of failing to adequately plan for this future growth, the GOT has committed a large portion of the budget resources allocated for the implementation of the VI Development Plan to efforts aimed at addressing these problems.

2. The Sites and Services Subproject; This subproject consists of prefinancing the land development agency's (AFH) development of serviced sites and the provision of mortgage credit to low-income beneficiaries. These mortgages will cover the combined cost of purchasing the developed sites and owner construction of core housing units. A maximum of 3,550 serviced sites will be developed by AFH for beneficiaries in secondary towns whose income is below the national median. An equal number of loans to cover land purchase and housing construction will be offered to these beneficiaries by the Housing Savings Bank (CNEL).

3. The Urban Upgrading Sanitation Subproject; This subproject will unite The IG Program of the Agency for International Development (AID) with the International Bank for Reconstruction and Development (IBRD) and the Kuwaiti Development Fund (KDF) in a unique effort to co-finance two projects which are part of the GOT's VI Development Plan (1982-1986). The A.I.D. portion of this co-financing effort will fund those foreign and local currency costs of the GOT's Greater Tunis Project and those local currency costs of the GOT's Thirty Cities Project which directly benefit low-income population groups and urban slum dwellers.

HG loan proceeds will be passed by the GOT to the National Sewerage Authority (ONAS) as equity contributions to finance the upgrading of secondary sewerage and storm drainage in selected low-income slum neighborhoods and towns. The use of HG funds will be limited to financing those items which are not covered by other donors and which are physically located within eligible neighborhoods or are off-site items which directly effect those target neighborhoods. These improvements will benefit an estimated 21,500 families in Tunis and 25,000 families in secondary towns throughout the nation.

4. Technical Assistance; In combination with this subproject USAID/Tunis will provide grant funding to assist the GOT to improve its capacity to program, manage and plan for urban growth. Two studies have been proposed for funding. They are; an "Urban Land Needs Assessment" and a "Municipal Capital Improvement Study".

G. Project Design Team;

- S. Hammam, Team Leader, RHUDO/NE
- S. Freundlich, NE/PD/MENA (TDY)
- B. Veret, PRE/H,GC/H (TDY)
- J. Tomaro, Senior consultant (Institutional Analyst/Economist)
- D. Kinsey, Consultant (Land Specialist)
- F. Lalande, Consultant (Engineer)

H. PRE/H Review Committee;

- J. Howley, Deputy Director
- D. Olinger, Assistant Director Operations
- D. Swerdlin, Project Officer
- F. Conway, Assistant Director Program Support
- P. Hussy, Assistant Director Urban Programs
- S. Walsh, Assistant Director Finance

I. USAID/Tunis Senior Program Review Committee;

- J. Phippard, Director, USAID/Tunis
- D. Leibson, Chief, RHUDO/NE
- S. Freundlich, NE/PD/MENA
- A. Williams, RLA/Rabat

## II. PROJECT BACKGROUND AND RATIONALE:

A. Project Background; At the end of FY 79 and in the beginning of FY 80 AID authorized a \$25 million HG loan as the first phase of Project 664-HG-004 to: "...assist in financing the housing program of the GOT for low-income households primarily in the smaller population centers in the interior of Tunisia." The Authorization further stated that shelter activities to be financed under the Project should include "...core housing projects, sites and service projects, construction and home improvement loans, and neighborhood upgrading projects". The total project cost was estimated at \$87.9 million of which \$50 million was to be financed through HG Program loans.

Interest rates in the U.S. then began to rise significantly and the GOT never proceeded to borrowing funds under the Project. However, beginning in FY 83 GOT planners again looked to the HG Program resource to help them meet growing investment needs in the Housing Sector.

Early in FY 83, as a first step in the utilization of the HG Program resources available under Project 664-HG-004, the use of \$4 million of the original HG authorization was approved (along with a \$1.75 million ESF grant) for loans to rebuild homes destroyed in recent flooding. Later in FY 83 the Ministry of Plan and Finance (MOP) approached AID with a request to use HG resources to co-finance two important GOT sanitation projects. One project focused on the Greater Tunis area and the other on Thirty secondary cities located around the nation. Both of these projects had already been designed and partial financed to cover the costs of foreign exchange. Funding had been obtained through the IBRD and the KDF respectively. At the same time the Ministry of Housing (MOH) also approached AID for assistance in financing its Sites and Services and Urban Neighborhood Upgrading Programs. The MOH was requested to prepare and finalize a list of proposed project sites for AID. AID then agreed to review the entire package of proposed projects to determine if it was appropriate for HG Program funding.

RHUDO/NE and USAID/Tunis then initiated a review of the AID Shelter Sector Strategy in Tunisia. The Review focused on the goals and purposes of the originally approved HG Project and on changes in the Sector since the time of approval. The Near East Bureau's Regional and Urban strategies and AID's overall sanitation policies were also reviewed in the context of the GOT requests.

The RHUDO review of the Shelter Sector and Strategy concluded that increased GOT resources would be needed to finance basic infrastructure in the Shelter Sector in order to provide serviced building sites affordable by low-income groups in the expanding urban zones. It also concluded that special emphasis and attention would be required in the area of sewerage service provision in order to upgrade living conditions in existing neighborhoods. The Review led the RHUDO and USAID to conclude that in the short-term, HG

financing should focus primarily on assisting the GOT to address the needs for urban services and land. Additionally, continued support should be given to the decentralization and income distribution objectives of the GOT. This could be done by increasing the capacity of GOT institutions to serve urban populations and low-income groups through the provision of technical assistance related to financial management and development planning at the municipal level, as well as through spreading the impact of planned formal shelter programs for land and service delivery to low-income groups in Tunisia urban centers.

In September of 1983, as a first step in determining the appropriateness of the proposed GOT sanitation projects for HG financing, a Water and Sanitation for Health (WASH) technical assistance team from AID/W assessed sector needs and reviewed the proposed GOT sanitation projects.

The Team recommended the use of HG funding to support the proposed projects based on the priority of these projects in terms of their ability to meeting sector needs and on the fact that residents of targetted small towns and certain neighborhood of Greater Tunis qualified as low-income beneficiaries under HG legislation. In October of that same year RHUDO with the Office of Housing (PRE/H) reviewed the policy and legal considerations relating to the Housing Guaranty Program authority to utilize HG Program resources for the proposed GOT Sanitation projects. The above review process led RHUDO and USAID/Tunis, in March 1984, to seek and obtain approval from the NE Bureau for the preparation of an Amendment to Project 664-HG-004 (See Annex D).

## B. Project Rationale;

1. Urbanization in Tunisia; In 1980, Tunisia's population of 6.3 million inhabitants was already highly urbanized with 55% of the residents living in urban areas and a national rate of urbanization which was 4% per year. This rapid rate of growth is due primarily to a high rate of natural population growth (even in urban areas), to the return of migrant workers from Europe and to migration from rural to urban areas. The latter accounts for half of the urban population increase in recent years. The largest number of migrants traditionally end up in Tunis, yet other parts of the country are also experiencing high net urban migration and urban growth rates. This indicates a growing locational shift in the urban shelter demand.

2. Shelter Trends; Statistical information on Tunisia's shelter situation, as of 1980, indicates a remarkable improvement in both housing quantity and quality compared to the existing inventory in 1975. According to IBRD estimates a total of 193,020 units were built in urban areas during the 1975-1980 period. These figures reflect both an increase in public sector production and the dynamism of the Private Informal Sector. The latter accounted for 50% of urban construction and most of the low-income populations' supply of housing.

While there has been substantial improvement in the production of housing by the Public Sector, urban shelter demand still outpaced its capacity to supply shelter, services and manage urban growth. The pressure on the existing housing stock and urban services has clearly increased. Overcrowding has become a problem with an estimated 26% of the urban population living in one room units in 1980 compared to 17% in 1975.

3. Provision of Services; Over half the units built during the 1975-1980 period were in contravention to urban development regulations. Most of this informal construction is low-cost and of relatively good quality but lacking in services. Such growth is a direct consequence of the inability of public authorities to adequately respond to the increased demand for land and to plan for and manage urban development in a timely manner. The high rate of construction by the Informal Sector has increased the supply of units for low-income groups but it has also had drastic repercussions on the level of public services and the urban environment in areas that have developed spontaneously with little guidance from municipal and land development authorities. Notably the provision of sewerage and drainage services has failed to keep up with rising demand.

While access to piped water service and electricity has shown a significant increase in urban areas, access to sewerage facilities has lagged far behind the rising demand despite efforts by ONAS. The gap between the activity levels of the water authority (SONEDE) and the wastewater authority (ONAS), has adversely affected health, the environment and urban sanitary conditions in low-income, high density neighborhoods. Those areas where sanitary conditions have been most adversely affected are unsewered peripheral settlements and small towns with high densities and the older sections of urban areas where existing public sewerage systems are overloaded. The major reason for this is that individual sanitation systems in peripheral areas and other unsewered locations are incapable of dealing with the increased volume of wastewater that is generated by the greater number of connections to the SONEDE piped water system. A similar situation exists in older, poor neighborhoods or in small towns where existing, older sewerage systems are unable to absorb the additional load caused by overpopulation. This is especially true in the medinas of larger urban centers such as Tunis and Bizerte.

4. Constraints; The major constraints to meeting growing Shelter Sector requirements are summarized below:

- The Public Sector's inability to overcome the existing backlog in providing infrastructure services to existing low-income areas and to meet the projected future needs of a growing urban population.

- The Public Sector's inability to adequately supply serviced housing sites and provide an effective financing mechanism to meet

the growing demand of low-income groups for serviced urban land.

-The lack of coordination between the parastatal agencies responsible for infrastructure, land finance and housing delivery, and the inability of these agencies to anticipate the rate development and the location of new housing settlement by municipalities around the nation.

-The high costs and standards of publicly produced housing which neglects the potential of a significant proportion of the population to construct for itself housing units of reduced but acceptable standards.

-The inadequacy of existing housing finance programs to meet the credit requirements of low-income groups.

C. GOT Shelter Sector Policy; The GOT policy in the Shelter Sector has shifted gradually towards satisfying the needs of low-income groups. The GOT is in the process of adopting public policies aimed at:

- giving priority to low-cost housing and discouraging luxury housing,
- accepting Urban Upgrading as an effective program for meeting shelter needs of low-income groups, and
- accepting Sites and Services and Self-help Construction as an alternative to the policy of financing and building the more costly and higher standard, completed housing units.

Policies and programs along these lines are now evolving and are likely to become major inputs into the VIIth Development Plan (1987 to 1991). In addition, as part of the VIth Development Plan's priority for regional development, the GOT has decentralized its Housing Investment Program with the aim of making formal programs for financing land and housing construction accessible to a wider spectrum of the urban population.

The VIth Development Plan's program for investment in housing projects calls for an investment of Tunisian Dinars (TD) 1.0 billion (\$1.4 billion) to build a total of 1.6 million housing units. It is estimated that this level of investment is about half the level needed to satisfy the projected total demand. The level of investment by the Public Sector is TD555 million (\$777 million) most of which is for completed units.

The GOT has also recently put into place an ambitious program in the Sanitation Sector aimed at bringing the level of connections to sanitary sewer services closer to the service level available in the supply of water. This objective is to be achieved through the rehabilitation, upgrading and expansion of existing sewer systems, the provision of flood control and drainage, and the development of treatment and disposal

facilities in order to safeguard the environment and abate health hazards. The GOT priority is to keep up the momentum of development of sewerage systems in the urban areas which are within ONAS' purview, to extend progressively ONAS' services to all other urban centers and to increase service levels by encouraging the population to connect to sewerage systems.

The GOT's projected investment in the Sanitation Sector is TD121 million (\$169.4 million). This level of investment and the programs it supports is viewed as necessary if the GOT is to achieve Sanitation Sector objectives, improve service rates, safeguard existing investments in directly productive industries, abate pollution and protect scarce water resources. Due to the economic priority of the planned investment program the GOT has maintained projected investment levels despite budgetary cutbacks in other sectors.

D. Other Donors;

1. Co-financing; The GOT program to implement the Thirty Cities Project and the Greater Tunis Project will join AID with the IBRD and the KDF in a unique co-financing arrangement. These respective projects have already been designed and approved by the GOT. Financial support from the IBRD and KDF has been arranged. The GOT's contribution to these projects was originally committed under the VIth Development Plan, but with the unanticipated slowdown in the economy public resources have been reduced and the GOT has requested HG participation to fill this funding gap.

2. IBRD Activities; The IBRD strategy in Tunisia has been to assist the GOT in attaining its service level objectives for water supply and sewerage and to increase the level of public enterprise savings through further improvements in management efficiency and tariff policy. The IBRD has played a major role in the establishment of both SONEDE and ONAS and has maintained a continuous dialogue with the GOT on sector policies. It has financed three separate Urban Sewerage Projects. The Thirty Cities Project is the third of these Projects. (For details of these projects see IBRD Staff Appraisal Reports for Tunisia Third Urban Sewerage Project; Report No. 42256-TUN, March 3, 1983 and PP ANNEX M.)

The IBRD has been active in Tunisia's Urban Shelter Sector through a variety of operations beyond those in the sanitation and water supply sectors. It, like AID, has financed shelter upgrading as part of its urban development programs. These programs have shared the same objectives as AID's involvement in the Sector, namely to reduce standards, encourage upgrading and land development as an alternative to financing completed units. The IBRD intends to focus future activities on financing upgrading and on AFH's land development program.

During the design process of this Project Amendment, AID has been in contact with the IBRD regarding the co-financing and contracting arrangements necessary to implement the Thirty Cities Project. It has been agreed that AID would jointly finance works on HG eligible sites with AID picking up the local currency costs as discussed in section III of the PP. Both the donors and the GOT have agreed to continue this interagency coordination effort throughout the life of the Project.

3. KDF Activities; When the GOT requested AID participation, the AA/NE initiated contacts with the KDF to discuss a variety of concerns related to the interagency cooperation which will be essential to the success of the co-financed Greater Tunis Project. Once the HG Project Amendment is authorized, representatives of the KDF and AID will again meet to discuss and arrange the details of contracting and disbursing funds. As in the case of the IBRD/AID co-financed Thirty Cities Project, both the donors and the GOT have agreed to continue this interagency coordination effort throughout the life of the Greater Tunis Project.

E. DETAILED PROJECT DESCRIPTION; An HG Program loan of \$46 Million in HG Program funds will be utilized to finance specific portions of two important GOT shelter activities.

1. Sites and Services Subproject; To assist the GOT achieve its objective of extending formal shelter programs to low-income groups the amended project will include a \$14 million component to provide serviced sites and credit for land purchase and development and for self-help housing construction for below median income groups. As a reflection of the growing shift in urban demand patterns, the Project focuses primarily on the rapidly growing small secondary cities in the least developed regions of the country. This activity will be undertaken within the context of AFH's Land Development Program in eight small interior cities using AID financing that is targetted on the portions of the AFH program which will benefit low-income groups.

The Program relies on the Housing Savings Bank (CNEL) to function as overall manager of the funds and on the Land Development Agency (AFH) to develop the sites. This linking of CNEL and AFH will enhance the institutional flexibility of both organizations by allowing them to serve, for the first time, the requirements of low-income beneficiaries for serviced land and credit. The CNEL acting as manager of the HG funds will use an estimated \$4.5 million to prefinance AFH's funding of site development. This prefinancing mechanism will allow AFH to deliver serviced sites to beneficiaries at the time that they sign up for mortgages. This represents a major shift in both CNEL and AFH practices and will speed up the process of land development as well as introduce CNEL to an alternative way of using resources to finance shelter production for low-income groups.

The prefinancing mechanism will allow AFH to develop up to 3550 plots in eight towns where it has already purchased land. The serviced sites will be provided with roads, electricity, and water and sewerage lines and connections. Such connections will be made where the possibility of hooking up to the CNAS sewerage system exists. The sites will be developed according to the conventional standards set by the national water, electricity and sewerage utilities. Serviced plots will range from 100 m<sup>2</sup> to 120 m<sup>2</sup> depending on the availability of sewerage systems. This represents a major reduction in standards and will allow AFH to offer lots at affordable prices to low-income beneficiaries.

The sites will be integrated within larger AFH land subdivisions to assure a socially heterogeneous mix of residential development. A total of 191.5 hectares are slated for development in the project towns, of which 53.25 hectares will be reserved for serviced sites (See Table 1). The land reserved for community facilities (schools, clinics, etc) will cover an estimated 15% of the gross site area and will be sold to the various GOT ministries (Health, Education, etc.). The remaining land will be taken up by roads, and sites developed under AFH's regular program for middle income groups (An illustrative example of the site development is provided in Annex G-5).

The proposed subproject will also demonstrate the feasibility of providing mortgages for both land purchase and self-help housing construction. These mortgages will be offered for the first time to purchasers of lots in AFH's regular Site Development Programs. They will increase the accessibility of serviced land to low-income groups and encourage private housing development at standards and costs which are below those of the completed housing units produced by the public sector.

Once the serviced sites are completed by AFH, CNEL will recover the funds advanced to AFH by offering beneficiaries a single mortgage loan enabling them to purchase the sites and construct a dwelling of up to 25 m<sup>2</sup>. A total of 3550 below median income beneficiaries are expected to benefit from this loan program and will build their homes either through owner self-help methods or by contracting with private small-scale builders.

CNEL will offer the mortgage loans on the basis of a 10% down payment by beneficiaries and at an interest rate of 7% per year over 15 years including a Grace Period on principal of 1 to 2 years during the period when the beneficiary is building his/her home. The construction of these self-help units will be undertaken with technical assistance provided by the MOH in the form of model plans and construction supervision. To avoid speculation, housing construction of the initial core must, in accordance with AFH regulations, be completed within a period of 2 years.

TABLE 1

SITES AND SERVICES  
PROGRAM

No.	City	Area to be developed	Area designated for serviced sites	Number of low-income plots
1	- HAJEB EL AYOUN	13.00 HA	5.00 HA	333
2	- TAJEROUINE	25.00 HA	7.00 HA	467
3	- GHARDIMAOU	14.00 HA	7.00 HA	467
4	- SBEITLA	10.00 HA	5.00 HA	333
5	- KASSERINE	14.00 HA	7.00 HA	467
6	- KEBILI	70.00 HA	10.00 HA	666
7	- TOZEUR	33.00 HA	10.00 HA	666
8	- JELMA	12.50 HA	2.25 HA	150
	T O T A L	191.50 HA	53.25 HA	3549

The mortgage loans will be disbursed by CNEL according to progress on construction with an initial 25% of the loan being available to initiate construction and the last 25% of the mortgage amount being disbursed upon completion of the roof.

Beneficiary selection will be a joint responsibility of the concerned municipality, AFH and CNEL. The municipality will initially prepare a list of potential beneficiaries. AFH will then add to the list from its record of requests for serviced plots and CNEL will then evaluate the income and credit worthiness of beneficiaries. A maximum of 20% of the beneficiaries will be below the median income level CNEL and FOPROLOS savers who have completed their Saving Plans. The remainder of the lots will be available to other salaried and non-salaried households chosen on a lottery basis once the number of requests are greater than the number of available lots.

2. Urban Upgrading Sanitation Subproject; To assist the GCT achieve its objective in extending and upgrading sewerage and drainage coverage, the amended project will include a \$32 million component to be implemented by ONAS over a period of 5 years. Through the Urban Upgrading Sanitation Subproject ONAS' responsibilities will be extended to an additional Thirty municipalities. The systems that are installed will represent the least-cost solution to the sanitation problems at the particular sites. Sewerage and drainage services will be provided on a cost recoverable basis to low-income beneficiaries.

The funding proposed would be borrowed by the GOT and passed on to ONAS to complement the financing needed to support the following activities:

a. The Thirty Cities Subproject; ONAS with IBRD assistance has designed a project for improvements in sewerage and stormwater drainage in thirty secondary towns with an average population of 16,000. The overall objectives of the Project are; to increase the number of household sewer connections, to improve urban sanitation and abate pollution, to provide stormwater drainage and to assist the GOT's efforts to develop a technically capable and financially self-supporting sewerage sector.

i. AID Assistance; AID will guaranty loans of \$24 million to be used on a joint-financing basis with the IBRD and GOT to extend sewerage and/or drainage services to selected low-income neighborhoods and towns characterized by slums conditions. Targetting AID financing in this manner will ensure that the low-income areas included in the overall project will receive priority attention and that the areas of greatest need are fully served.

In the fifteen or more specific sites which qualify for HG assistance, the HG resources will be used to partially fund the following outputs:

-upgrading of low-income neighborhoods covering a total area of 1000 hectares through the provision of 124 Kms. of sewerage and/or drainage lines;

-a total of 15,500 new household sewer connections increasing the average connection rate within these fifteen sites from 20% to 58%;

-provision or extension of treatment systems in four of the towns; and

-provision of 7 Kms. of stormwater collectors in areas of three of the towns where stagnant rainwater creates health problems.

The subproject covers the rehabilitation and expansion of existing sewer and stormwater systems in fifteen of the thirty towns distributed geographically as follows:

TABLE 2

GEOGRAPHIC DISTRIBUTION OF THE THIRTY CITIES PROJECT SITES

<u>Region</u>	<u>SITES</u>
North East	Bizerte (low income neighborhoods of Zarzouna and cite Andalous)
Center East	Menzel Temine, Sayada Lamta Bou Hajjar, Kalaa Saghira, Sahline, Msaken, Ksour Essaf.
Center West	Mahares, Sbeitla, Sidi Bouزيد.
South	Nefta, Medenine, Tataouine.

These towns represent a potential list of prioritized sites eligible for HG financing. They have been selected according to criteria which took into account both sanitary conditions and incomes. The most important criteria were; unsanitary conditions due to the total inadequacy of existing wastewater and drainage facilities, high urban densities, and a low-income population (See Annex H).

The poor shelter conditions within the towns to be assisted by HG funds are summarized below:

-Four of the towns (Sbeitla, Mahares, Medenine and Ksour Essaf) are completely without collective sewerage systems and rely on individual systems. The efficiency in operation of these individual systems is hampered by one

or a combination of the following conditions: insufficient soil permeability and underdesign of the facilities, proximity to river beds or the sea shore, insufficient distance from nearby groundwater, high urban densities causing insufficient permeability, and lack of storm drainage and exposure to frequent flooding. As a result of these factors sanitary conditions within these towns are characterized; by overflow of effluents directly into the streets or open drainage ditches, reversal of water flows into soak ways caused by swellings and high tides, contamination of well water used for drinking, and frequent flooding.

-Nine of the remaining ten towns fall into a category of towns where individual systems are combined with a small sewer system which serve the center of town. The existing sewerage connection rates in nine of the towns where a small system exists are generally below 20% compared to an average of 40% for the urban population nationwide. Sanitary conditions are usually inadequate in these towns due to; the rapid rate of connection to the water distribution system which causes environmental hazards due to the large volume of wastewater discharged into river beds (Sahline, Sayada Lamba, Bou Hajjar, Ksar Hellal, Teboulba, Nefta, Sidi Bouzid, Kalaa Sghira); the obstruction of the systems; the poor quality of sewer pipes which cause frequent leakages and contamination of groundwater; and the lack of adequate facilities which will allow the reuse of water in scarce water resources areas (i.e. Nefta, Sbeitla).

-In the tenth town, Bizerte, two low-income neighborhoods were selected for improved sewerage and drainage.

The use of HG Program funding will be limited to financing the costs of ONAS sewerage and drainage facilities needed to deal with the problems described above. Thus the project will finance sewerage and drainage facilities within the neighborhoods, and the secondary systems, the primaries systems and the waste treatment systems which are reasonably allocable to the upgrading of target neighborhoods and towns. The specific activities within each site will vary according to prioritized needs, however most of the activities will focus on the extension of sanitary sewerage lines in order to allow low-income households to connect to sewerage.

b. Greater Tunis Subproject; The AID input to this subproject will consist of \$8 million to be utilized to upgrade living conditions in four of the neighborhoods targetted for sewerage and drainage works under the Greater Tunis Project. The Project, which is partially funded by the KDF, was designed to include major works; to increase the number of house connections to sewerage systems, to rehabilitate existing combined systems, to provide primary sewers to new urban

areas not foreseen in the Tunis Master Plan, and to construct main drainage canals and primary/secondary drainage in selected project areas. The HG funded project components will focus on those works which directly benefit low-income neighborhoods. Specifically, they will focus on upgrading a total area of 845 hectares and improving the environment for 133,000 residents through; recalibration of existing systems serving an estimated 100,000 residents, the provision of an additional 2,500 household sewer connections, stormwater drainage benefitting an estimated 10,000 residents, and the extension of treatment systems to reach an additional 19,500 residents of low-income areas.

The specific components which will be funded under the overall Greater Tunis Project consist of sewerage and drainage construction elements within the low-income sites. The HG Greater Tunis Project will finance both the local and foreign costs of upgrading the spontaneously developed areas of El Aouina, Sidi Daoud and Djebel Jelloud, as well as the recalibration works which will serve the medina in Tunis. To ensure smooth implementation of the overall Project, consultants will assist ONAS in the design and supervision of the works. The HG funds would be used to finance the following;

- i. Construction of 7.5 kms. of combined sewerage and drainage serving the medina of Tunis,
- ii. Construction of 5.1 kms. of secondary sewerage lines in the spontaneous settlement of El Aouina and in the low income neighborhood of Djebel Jelloud,
- iii. Construction of 13.4 kms. of primary and secondary drainage systems in El Aouina, and Sidi Daoud, and
- iv. Tunisian engineering services for design and supervision of works on HG eligible sites.

3. Technical Assistance; A third and connected element of the overall AID involvement in the Shelter Sector of Tunisia will be the provision of technical assistance grants from the ESF funded Private Sector Development and Technology Transfer Project 664-0328 to aid the GOT in the analysis required to design and formulate urban programs and policies for their next Five Year Development Plan. An estimated \$100,000 of ESF funds would be required to assist the GOT to address land and service delivery issues and related municipal management and finance questions. These resources will finance an "Urban Land Needs Assessment" focusing on the needs for land and infrastructure for new and existing housing and a "Municipal Capital Improvement Study" which will assist a representative municipal government prepare an Economic and Financial Development Plan to coordinate short and long-range investments in the Shelter Sector. Both of these studies will allow AID to participate in policy dialogue with the GOT on the two areas which present the major challenge to further shelter and urban development (Draft Terms of Reference for the two studies are included as Annex G-(e)).

The KDF is also funding a contract for a consultant advisor to ONAS on the Greater Tunis Project. AID will not be participating in the funding of this contract.

Additionally, the IBRD portion of the Project provides for maintenance and data processing equipment, and for consultant services related to design and supervision of construction work. Two studies are also included under the IBRD portion;

- a feasibility study for ONAS to take over 10-15 new centers and for the reuse of treated sewage for industrial and agricultural purposes; and

- a computer and information system study.

Both of these studies will further help ONAS to achieve the objectives set for it. (i.e. catching up with the backlog in the provision of services in Tunisia and addressing one of the major environmental problems facing ONAS current operations. See Section V.F. of the PP for details.)

III. PROGRAM COST ESTIMATE AND FINANCING PLAN: The total AID financing for the Project calls for use of \$50 million in funds. Of this amount, \$25 million was authorized in FY 79 and FY 80, and \$4 million will be borrowed in FY 84 for flood reconstruction. The amended project will therefore utilize the balance of \$21 million remaining from the earlier authorizations along with an additional \$25 million to be authorized upon approval of this Project Amendment.

These funds will be used to support two Shelter Programs with a total cost of \$144 million. First, a total of \$14 million will be used in combination with GCT and beneficiary financing to fund the development of serviced sites and housing construction by low-income beneficiaries in the interior towns of Tunisia. Second, a total of \$32 million in combination with the IBRD, KDF, the GOT and ONAS, will finance the Urban Upgrading Sanitation Subproject within the context of VIth Development Plan sanitation programs; the Thirty Cities Subproject and the Greater Tunis Subproject. Table 3 provide a breakout of the cost of the various project components by source of funding.

A. Sites and Services Subprojects; Total program costs are estimated at \$20 million of which AID will provide \$14 million, beneficiaries \$1.4 million through downpayments and the GOT \$5.2 million. The costs for the AID funded component were calculated on the basis of land prices and land development costs on 3,550 sites and on the cost of self-help construction of 3,550 units. Total costs for land development are estimated at \$5 million and the costs of construction are estimated at \$10.4 million. These costs would be financed by the HG loans and by beneficiary downpayments. All costs would be recovered through the mortgage credit extended to beneficiaries. Additionally, beneficiaries would also pay for the costs of connections to sewerage and other utilities. However these costs have not been included in estimating total program costs. The GOT contribution consists of the costs of acquiring the land developed by AFH for community facilities and will be budgeted by the various GOT institutions.

B. Urban Upgrading Sanitation Subprojects; This component of the Project calls for use of HG funds for the following two sub-projects.

1. The Thirty Cities Subproject; Total costs for this Subproject are estimated at \$74 million to be financed from three different sources, the GOT, the IBRD, and AID (see Table 3). This total cost includes a local currency component of \$40 million (54%). The contribution and terms of financing from each of the funding sources are as follows:

a. The GOT; The local contribution in the amount of \$16 million will be in the form of ONAS internal cash generation, customers contributions, and a GOT contribution. This amount will fund local costs of works on sites not eligible for HG financing, as well as a portion of the local costs on sites selected for HG financing.

TABLE 3

## SUMMARY COST ESTIMATE AND FINANCIAL PLAN

(U.S. \$ 000)\*

\*Note: All totals and sub-totals have been rounded to nearest whole number.

Uses	AID		GOT		IBRD		KDF		Beneficiaries LC (downpayments)	Total
	FX	LC	FX	LC	FX	LC	FX	LC		
<u>Urban Upgrading</u>										
1. Thirty City Project										
a) Sewerage & Drainage		11.6		11.4	16.8					39.8
b) A & E (design and supervision and Studies)		1.5		-	2.3					3.8
c) Miscellaneous		-	-	-	4.4					8.2
d) Physical Contingency		3.8	-	1.2	2.3					5.2
e) Price Contingency		1.7		3.7	7.9					17.4
		5.8								
Sub-Total (rounded)		24.0		16.0	34.0					74.0
2. Greater Tunis Project										
a) Sewerage & Drainage	1.3	4.4	5.1	13.0			8.6			32.4
b) A & E (Design & Supervision)				.5			.8			1.3
c) Physical Contingency	.2	.4		1.4			.9			2.9
d) Price Contingency	.6	1.2	1.9	5.7			3.7			13.1
Sub-Total (rounded)	2.0	6.0	7.0	21.0			14.0			50.0
3. Sites & Services										
a) Land		4.5							.7	5.2
b) Housing		9.5							.7	10.2
c) Community Facilities				5.2						5.2
Sub-Total (rounded)		14.0		5.0					1.0	20.0
TOTAL	2.0	44.0	7.0	42.0	34.0		14.0		1.0	144

TABLE 4

COSTING OF PROGRAM OUTPUTS/INPUTS

(US \$ 000)

Tunisia Low cost Shelter and Sanitation Upgrading Project 664-HG-004  
(Amounts have all been rounded to the nearest whole number)New  
X Revised

Program Inputs	1) Thirty Cities	Program Outputs 2) Greater Tunis	3) Sites & Services	Total
AID (H.G. Program Loan)	24.0	8.0	14.0	46.0
IBRD Loan	34.0	-	-	34.0
KDF Loan	-	14.0	-	14.0
GOT Contribution	16.0	28.0	5.0	49.0
Beneficiaries	-	-	1.0	1.0
TOTAL	74.0	50.0	20.0	144.0

b. The IBRD; The IBRD loan in the amount of \$34 million will be used to finance the total foreign exchange costs of sewerage and drainage works, the costs of purchasing new maintenance and other equipment as well as the costs of consultant studies and technical assistance to ONAS. This loan was contracted in 1983 at a floating rate of 11.43% for 17 years with a 3 years grace period.

c. The AID financing; AID financing will be limited to the local currency component of program costs within or reasonably allocable to those neighborhoods in the overall program characterized by slum conditions. The amount of AID financing will also be limited to the percentage of the population in those neighborhoods which is below the median income, except as may be justified by special circumstances.

The costs of improvements in or allocable to the neighborhoods tentatively identified as meeting these conditions are shown in Annex H. Each of these Subprojects will be reviewed and neighborhood incomes evaluated. A percentage of total costs will be determined for each subproject representing the lower of; (a) the local cost component based on IBRD breakdowns of foreign exchange and local costs, or (b) the proportion of below median income households. This percentage will be the basis for disbursements of HG financing. Requests for disbursement will be based on the same documentation of project progress and expenditures as submitted to the IBRD. Double counting will be avoided since the IBRD will finance only the portion representing foreign currency costs while AID's financing will be limited to local currency costs.

Estimated costs allocable to HG financing are detailed in Annex H and summarized in tables 3 and 4. These show a total AID contribution of of \$24 million.

2. The Greater Tunis Subproject; Total subproject costs are \$50 million to be financed from three different sources; the AID, the KDF and the GOT.

a. AID contribution; The AID financing of \$8 million represents the total cost (foreign and local) for sewerage and drainage works to be undertaken in four low-income neighborhoods which are included in this Subproject. The AID contribution will consist of all costs associated with works and materials at specific sites.

b. KDF contribution; The KDF contribution to the Project will total \$14 million for direct foreign exchange costs including an advisor to ONAS. The KDF loan will be made at 3% over a period of 20 years with a grace period of 5 years.

c. GOT contribution; The GOT contribution will be \$28 million approximately 56% of total costs of the Project. These GOT funds will cover both local costs and indirect foreign exchange costs on sites not financed by the HG loan.

TABLE 5  
ESTIMATED PROGRAM EXPENDITURES BY FISCAL YEAR  
 (US \$ 000)

Fiscal Year	AID	GOT	IBRD	KDF	Sites and Services Beneficiaries Downpayments	Total
1983	-	1.4	1.2			2.6
1984	5.7	6.2	4.0	.5		16.4
1985	7.4	9.9	7.3	2.0	.7	27.3
1986	9.7	6.6	6.5	3.0	.7	26.5
1987	12.2	12.0	11.0	3.0		38.2
1988	8.0	3.6	4.0	3.0		18.6
1989	3.0	4.1	-	2.5		9.6
Community facilities*	-	5.2	-	-		5.2
<b>TOTAL (rounded)</b>	<b>46.0</b>	<b>49.0</b>	<b>34.0</b>	<b>14.0</b>	<b>1.0</b>	<b>144.0</b>

\* Schedule for construction of community facilities to be determined with final approval of sites.

C. Disbursements; An estimated expenditure schedule has been developed for the total program including IBRD, KDF, and GCT outputs (Table 5). The HG funds will be fully disbursed by 1989 when all works will have been completed on the HG eligible sites. The balance of work on other sites will be completed by 1990. The disbursement of HG funds is projected on the following schedule:

TABLE 6

ESTIMATED SCHEDULE OF THE DISBURSEMENT OF HG FUNDS  
(U.S. \$000)

	1984	1985	1986	1987	1988	1989	Total
Thirty Cities	1.8	3.1	5.6	7.0	5.0	1.5	24
Greater Tunis	.5	1.0	1.0	2.0	2.0	1.5	8
Sites & Services	3.4	3.3	3.1	3.2	1.0	-	14
Total	5.7	7.4	9.7	12.2	8.0	3.0	46
Cummulative	5.7	13.1	22.8	35.0	43.0	46.0	

IV. IMPLEMENTATION AND MONITORING PLAN:

A. Responsibilities of the Major Institutions; The GOT Ministry of Plan as borrower will channel \$32 million required for financing of the Urban Upgrading Sanitation Subproject to ONAS on the basis of an equity contribution and \$14 million to finance implementation of the Sites and Services Subproject will be channeled through AFH and CNEL to project beneficiaries.

1. Sites and Services/Housing Credit Subproject: Acting primarily through an affiliated institution, AFH, the Ministry of Housing (MOH) will be the technical ministry responsible for the GOT's Sites and Services/Housing Credit Program. The MOH will be directly responsible for providing model unit designs for the housing units to be built by beneficiaries and for monitoring the construction of the housing units.

AFH will be responsible for overall execution, management, and coordination of the Program. It has already acquired the needed land and will be responsible for the development of the serviced sites, by locally contracting for the civil works and site development and for the construction supervision. On some of the sites engineering is already underway and on other sites preliminary approval of plans by the Regional Subdivision Commission has been obtained. AFH has agreed to revise its site designs once the HG Project is authorized. These revision will be then be submitted to RHUDO for approval before they are resubmitted to the Regional Subdivision Commissions for final acceptance and incorporation into their Master Plans. Upon completion of the works, AFH will deliver serviced plots to beneficiaries and issue land titles secured by a mortgage with CNEL. AFH will also sell land reserved for community facilities to the appropriate Ministries.

CNEL, serving as a financial manager for the loan will also prefinance AFH's site development works. CNEL will verify income and process mortgages to eligible beneficiaries for land acquisition and self-help housing construction.

Apart from chairing the beneficiary selection process, municipalities will also be responsible for maintaining AFH-developed stormwater drainage systems, roads, street lighting, and open space, providing solid waste disposal services, and acquiring serviced sites designated for certain municipal community facilities and building these facilities.

The beneficiary selection process will be a joint responsibility of the Municipalities, AFH and CNEL. Municipalities will chair the Beneficiary Selection Committee for the program and prepare an initial list of potential beneficiaries. AFH will add to the list from its records of requests for serviced plots and CNEL will evaluate the credit worthiness of potential beneficiaries. There will be two selection procedures: (a) a maximum of 20% of the sites and services plots will be reserved for CNEL and FORPOLCS subscribers, below the median income, who have

completed their official savings plan and live in the Municipality. These plots will be distributed based on the date of application and enrollment in the two financial schemes, and (b) a minimum of 80% of the sites and services plots will be made available to other salaried and non-salaried households living in the municipality who do not own a house and are below the median income. These plots will be distributed on a lottery basis if there are more requests than available plots.

Several subagreements will be prepared by the implementing institutions for the execution, operation and maintenance of the Sites and Services/Housing Credit Program.

First, an agreement between the GOT and CNEL will delegate authority to CNEL to serve as a manager of the HG funds and specify the scope and terms of the sites and services/housing credit program.

Second, an agreement between CNEL and AFH will provide for CNEL prefinancing of AFH site development work, CNEL management of the beneficiary selection process, the reservation of up to 20% of the plots for CNEL and FORPCLOS subscribers, and sale by AFH of serviced plots to designated beneficiaries.

Third, an agreement between AFH and each of the Municipalities will specify the scope and timetable of the AFH project, provide for the Municipality's role in the beneficiary selection process, and address the Municipality's land acquisition, public services, maintenance and community facilities operation responsibilities. The agreement will also specify the respective roles of AFH, MOH, and municipal staff in issuing building permits and monitoring and supervising site development and housing construction.

Fourth, a sales contract between beneficiaries and AFH will include standard terms, such as measures to minimize purchases for speculative purposes by requiring purchasers to; (a) begin construction within one year from the date of purchase, (b) complete the initial core of housing within two years, (c) give the municipality or AFH a right of first refusal for five years in the event of resale, and (d) use the property for a primary owner-occupied residence.

2. Urban Upgrading Sanitation Subproject; Technical monitoring and supervision of the construction of sewerage and drainage works will be the responsibility of ONAS which will be assisted in this task by engineering consultants. These consultants have already started the preparation of final studies and will assist in the preparation of tender documents and supervision of the construction work. The works are grouped by sites in order to facilitate procurement of materials and contracting for civil works. ONAS will have responsibility for the technical monitoring and supervision of all phases of the project from the design of civil works, to their execution. ONAS will also be responsible for maintenance once the works are completed.

B. Procurement/Contracting Plan;

1. Sites and Services Subproject; Procurement of materials by AFH will be bid on the basis of local competitive bidding following AFH standard procedures. The self-help construction will rely on beneficiaries to contract for materials and labour needed to build their own homes.

2. Urban Upgrading Sanitation Subproject;

a. The Thirty Cities Subproject; International competitive bidding (ICB), following IBRD guidelines, will be used for awarding major civil works, equipment supply and pipe laying contracts. Contracts will be grouped as far as practicable to encourage international competition. ONAS will have responsibility for acquiring all materials and making them available to contractors. Treatment Plants under the Thirty Cities Subproject will be grouped into two separate contracts. One contract for equipment supply and installation and another contract for civil works. These contracts will also be awarded under the IBRD guidelines for ICB. Small contracts for equipment and works which are not expected to attract international competition will be awarded using ONAS procedures for local competitive bidding.

b. Greater Tunis Subproject; The same ICB procedures will be followed for this portion of the Project as for the Thirty Cities portion of the Project. However, the works and supply contracts will not separate materials and civil works for HG eligible sites from sites funded solely by GOT and KDF. Rather, all materials for the entire subproject will be bought under 2-3 subcontracts and civil works contracts will be divided by areas rather than individual sites. The result is that AID, GOT and KDF may be financing portions of the same contract.

This has raised an issue concerning the possibility of the inclusion of Restrictive Trade Policies (i.e. Arab boycott) in the award of contracts for civil works and materials. To avoid this problem AID has explored several alternatives. That of separate but parallel financing may not be feasible for ONAS because of fiscal desirability of grouping several sites into one contract. As a result AID will monitor this issue through the following Contract Approval Process. AID will retain the right to approve the competitive procedures, the Invitations For Bids and the contract awards for all contracts it is co-financing with the KDF. This process will include the right to review award procedures which appear questionable. AID will then retain the right to withdraw from financing any contracts where the process or award unjustifiably excluded a potential bidder.

C. Project Implementation; It is estimated that implementation of the GOT's Programs in both the Sanitation and Housing sectors will be completed within six years (i.e. 1990). The HG funded portions of these overall programs should be completed within five years of signing the HG Agreement (i.e. 1989). Below are illustrative tables of the estimated Implementation Schedules for the individual elements of the GOT Programs. For a more detailed illustrative implementation schedule of each of the subprojects see Annex I.

TABLE 7

GREATER TUNIS AND THIRTY CITIES PROJECTS\*

Implementation Phases	Years							
	83 1234	84 1234	85 1234	86 1234	87 1234	88 1234	89 1234	90 1234
(A)Material procurement and delivery **								
1. Thirty Cities Project								
a.Preparation of Documents.....		—	—					
b.Bidding Process.....		—	—	—				
c.Actual Work.....								—
2. Greater Tunis Project								
a.Preparation of Documents.....		—	—					
b.Bidding Process.....		—	—	—				
c.Actual Work.....								—
(B)Execution of Civil Work ***								
1.Thirty Cities Project								
a.Preparation of Documents.....		—	—					
b.Bidding Process.....		—	—	—				
c.Actual Work.....								—
2.Greater Tunis Project								
a.Preparation of Documents.....		—	—					
b.Bidding Process.....		—	—	—				
c.Actual Work.....								—
(C)Wastewater Treatment Plants ****								
1.Procurement & Delivery.....		—	—	—				
2.Civil Works.....								—

\*NOTE: The Schedule represents an approximation of the time required to complete implementation of the total Greater Tunis and Thirty Cities Projects including all components funded by HG/AID, IBRD, KDF and GOT.

COMPONENTS ELEMENTS OF EACH IMPLEMENTATION PHASE:

- \*\* (A) Procurment of pipes (primary & secondary) and pumping station components.
- \*\*\* (B) Recalibration, household connections, sewerage and storm drains.
- \*\*\*\* (C) Procurment, delivery, construction and installation of Wastewater Treatment Plants.

TABLE 8

SITES AND SERVICES IMPLEMENTATION

DESCRIPTION	1984				1985				1986				1987				1988				1989			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Land Acquisition	xx																							
2. Plans, Approvals, + Contracts	xxxx																							
3. Design + Approval of Sites + Services Plots		x																						
4. Infrastructure		xxxxx			xxxxx																			
5. Plot Allocation + Land Sales		xxxxx			xxxxxxxxxxxx				xxxxx															
6. Housing Credits + Construct.						xxxx			xxxxxxxxxxxx				xxxxxxxxxxxx				xxxxxxxxxxxx							
7. Connections									xxxxxxxxxxxx				xxxxxxxxxxxx				xxxxxxxxxxxx							
8. Community Facilities *					xxxxxxxxxxxx				xxxxxxxxxxxx				xxxxxxxxxxxx				xxxxxxxx(1)							

\* Community Facilities will be constructed as needed, though land would be available for the full complement of facilities to serve the total site.

D. Monitoring Plan; The detailed information required to monitor a HG Project on a continuing basis is contained in the Program Implementation Plan (PIP) which is developed as part of the Project Implementation Agreement. This document combines scheduling, design standards, costs, and a variety of applicable implementation monitoring procedures. A complete and updated PIP is required for AID approval of each disbursement of loan funds. RHUDO's continual responsibility to review and approve the PIP, prior to each disbursement, provides an opportunity to keep the Project on its intended course and to initiate revisions of the PIP as required during the life of the Project.

RHUDO/NE plans to hire an additional staff member to assist in the ongoing monitoring of this HG Project. It is anticipated that this (PSC) staff member will be a qualified and experienced Tunisian engineer. The engineer will make quarterly site visits to ONAS and AFH subproject sites. Site visits will be utilized to monitor progress of construction and review site plans, specifications and the management of cost control systems by the implementing agencies. In addition, Quarterly Progress Reports will be provided to RHUDO by ONAS and AFH on all aspects of the project work. These Reports will be reviewed by the RHUDO PSC engineer.

V. SUMMARY OF PROJECT ANALYSES:

A. TECHNICAL ANALYSIS;

1. Sites and Services Subproject; The Ministry of Housing (MOH) is responsible for the coordination of the GOT's National Housing Program. The HG Subproject relies on CNEL to function as the overall financial manager and on AFH for the acquisition, development and sale of serviced housing sites for the target beneficiaries.

a. Technical Capability of Implementing Agencies; As part of the Project Design Team's analysis, the technical capability of the implementing agencies, AFH and CNEL was reviewed (See Administrative Analysis). In addition, Team members visited a number of the proposed project sites and a number of already completed AFH sites. As a result, the Team concluded that "AFH is well staffed and has had more than a decade of demonstrated capability in carrying out this function (developing serviced housing sites)" and that CNEL "... is a well managed institution with firmly established procedures having the capability to carry out its role under the (subproject)."

b. Site Selection; A two-step process was used in selecting sites to be developed under the Subproject. Initial selection was completed by an AFH review of its current portfolio of sites under active planning for which it had acquired the land. A total of seventeen sites were proposed for funding all of which were in interior cities. A second stage selection was made by the Project Design Team working with AFH to permit a ranking of the sites by expanding the criteria to include land control and urban planning objectives, social and economic integration potential. The eight sites finally selected are either parts of already adopted Local Land-Use Master Plans or have been approved by the appropriate regional planning officials for inclusion in soon to be completed Local Land-Use Master Plans. In addition, each of the selected sites meets technical criteria for physical suitability and accessibility and has good potential for being integrated into proposed subdivisions. Lastly work on most of these sites can be initiated almost immediately to assure prompt implementation.

c. Site Development; The sites will be developed to the conventional standards AFH uses for infrastructure services, based on standards set by the national utilities agencies for water, sewerage and electricity. AFH already owns all the land required for development of the selected sites. This ensures that delays will be minimized, since the land acquisition process is lengthy and difficult to predict. The sites include both new neighborhoods and extensions of existing neighborhoods. They all have the potential of being successfully integrated into the urban structures of the towns in which they are located. The low-income housing plots developed by AFH under the Subproject will encompass approximately 28% of the net area of

subdivisions and will be a completely integrated element of the subdivisions that make up the overall sites. As a first step in servicing the selected sites AFH will either contract with local Architect/Engineering (A&E) firms or will assign AFH technical staff to design site specific, detailed development plans. As a result of the ongoing RHUDO/AFH dialogue, AFH has agreed to the development of plots with reduced size. The average size of such plots will be reduced from 400 m<sup>2</sup> to 100 m<sup>2</sup>. Where sewers are not available, the plot size will be increased by approximately 20 m<sup>2</sup> to include the land necessary to provide cesspools or septic systems. This reduction in size will allow AFH to lower the price of such plots to a level which will make them affordable, for the first time, to low-income target beneficiaries. This is viewed as a major achievement of the HG Subproject. AFH has also expressed interest in experimenting with "Bertaud Model" techniques to reduce physical standards on one site based on an evaluation of the tradeoffs between costs and standards of site designs.

Under standard AFH procedures a portion of each subdivision is reserved for the development of a variety of community facilities. This normally amounts to about 15% of the total land area to be developed. Lots designated for community facilities such as schools, clinics, etc. will be sold at cost to the appropriate GOT ministries. In addition, specific lots in each subdivision are designated for the development of commercial facilities and then sold by AFH at auction to the highest bidder. Improved roads and the lots for some public facilities (e.g. mosques) are donated to the appropriate municipalities with the costs being recovered by including them in the sale price of other lots in the subdivision.

Using standard government procurement practice, which is acceptable under AID regulations, AFH contracts with Tunisian A&E firms and with private local construction firms for the design, supervision and civil works necessary to develop AFH sites. Upon completion of the civil works, AFH will deliver the serviced plots to beneficiaries and issue titles which are secured by CNEL mortgages. Based on existing core housing prototype plans, the MOH will advise low-income beneficiaries on the design and construction requirements of self-help housing units. (See ANNEX G-(e) for an illustrative example of site development under the Sites and Services/Housing Credit sub-project.)

2. Urban Upgrading Sanitation Subproject; This subproject focuses on upgrading and expanding the availability of sanitary sewerage and drainage in selected low-income urban neighborhoods and secondary towns. The subproject relies on ONAS to function as overall supervisor and implementor of the program with assistance from consultants as described below.

a. Technical capacity of ONAS; The Ministry of Equipment (MOE) is responsible for Tunisia's National Sanitation Program. By GCI decree, ONAS, an autonomous agency which reports to the MOE, is to respond to the wastewater needs of all communities with populations greater than 2,000.

From its establishment in 1975, ONAS has had the objective of taking charge of all the urban sewerage and storm drainage activities in Tunisia. Therefore the responsibilities of ONAS include not only the upgrading, rehabilitation and extension of existing municipal systems, but also the construction and management of new systems in towns throughout Tunisia. In general ONAS adheres to a national plan of phased implementation which follows a schedule originally developed in 1977 by a Dutch consulting firm, Ingenieurs Conseils Neerlandais (ICN). This plan and the schedules which flow from it were last updated by that same Dutch firm in 1982.

b. Organizational Technical Standards; Normally ONAS projects combine the sewage and storm water flows of a particular municipality by implementing construction according to the requirements of the individual municipality's drainage basin. By following a practice of not combining more than one drainage basin in a single system, ONAS often avoids the necessity of carrying wastewater from one basin over a dividing ridge to another basin and thereby limits the requirement for pumping stations in a particular system. This practice is utilized to keep the costs of the systems as reasonable as possible. However, it should be noted that occasionally ONAS is required by the dictates of topography to depart from its standard procedure and construct additional pumping stations for a particular municipality. Construction by individual drainage basins also generally requires separate sewage treatment plants to handle the flows from each basin.

The sanitary sewer lines, utilized by ONAS, are usually AC pipes and range from 250 mm. to 400 mm. Most houses are connected to a secondary sewer line, normally a 250 mm AC pipe. Depending on sizes, the primary line is usually made of reinforced concrete pipe (RCP) sealed with a rubber ring. The manholes are normally prefabricated concrete sections but poured in place.

A number of alternative technologies were considered for the treatment plants which will be constructed under the overall Thirty Cities Project. These included activated sludge, oxidation ditches, trickling filters, aerated lagoons, anaerobic ponds, aerobic ponds facultative lagoons and spreading fields. The technologies chosen, activated sludge and aerated lagoons, represent the least-cost alternative solution. It should also be noted that the technology to be used in the upgrading and installation of sewers and other infrastructure such as pipework, house connections, storm drainage and recalibration also represents the least-cost alternative solution. For example sewers are built to their ultimate capacity to avoid future high costs of recalibration.

In designing the projects a conscious effort was made to ensure that the solutions proposed represent the least-cost solution. A review by the Project Design Team concluded that the piped approach is the least-cost solution to the needs of Tunisia and that there is sufficient water available to flush the system. Alternative technologies are likely to be more expensive. Cost and maintenance of such technologies would require the establishment of a new implementing agency in order to install and operate the new systems.

c. Organizational Procedures; ONAS procedure for the implementation of construction projects, (i.e. new house connections, collector lines, pumping stations and sewage treatment plants) is to utilize the services of private contractors selected through competitive bidding. Compliance with the specifications of a particular project is insured by means of a pre-implementation review of the work plans and by on-site construction supervision of ONAS field engineers. This method of operation assures that the overall quality of the work is acceptable and that construction schedules and budgets are adhered to. Maintenance records for municipal sewerage and drainage systems, including all conduits leading from individual household connections and for treatment plants are generally well kept by ONAS staff. Based on detailed reviews of past, and present projects and operations, it is clear that ONAS has the technical capability to implement their overall programs.

d. The Thirty Cities Subproject; The GOT Program incorporates a variety of construction elements which will improve the sanitary sewerage and storm drainage facilities in 34 municipalities at 30 urban sites throughout Tunisia. The construction elements of the overall project are summarized as follows:

1. 110 km. of primary sewers,
2. 300 km. of secondary sewers,
3. 20 pumping stations,
4. 23 km. of storm drainage,
5. 12 new sewage treatment plants,
6. expansion of an existing treatment plant, and
7. connection of five previously unconnected towns to existing treatment plants.

As of 1981 the sewerage connection rate of the 34 towns included in the overall project averaged 42%. At that time five of the towns had only individual sewage systems and nine of the towns had communal but limited piped collection systems. Only one town, Dar Qhaarbane, had a functioning sewage treatment plant. The existing collection systems in the other target towns discharge raw sewage into nearby oueds or into an open field where it was being reused for irrigation and fertilization of agricultural lands. This Project will address these problems. It is estimated that the overall project will be completed within six years and that it will produce substantial improvements in the level of sanitation and in the amount and quality of treated effluents that are available for industrial and/or agricultural reuse. (See Environmental Analysis)

Implementation plans and schedules for the Project were updated in 1982 by ICN. These plans were reviewed and found to be acceptable to both the IBRD and RHUDO/NE for the purpose of implementing this Project. ONAS with the assistance of engineering consultants will be responsible for the technical supervision of all of the construction elements in The Thirty Cities Project.

e. The Greater Tunis Subproject; This subproject is part of a comprehensive program for the provision of sewerage and drainage services in the Greater Tunis area. The Project follows two earlier projects which were partially financed by IBRD loans. The second of these IBRD financed projects is presently being implemented.

This third component of the Program is designed to address unmet sanitation needs in Tunis and areas of new settlement around Tunis which were not included in the 1978 Land-Use Master Plan for the area. The primary sewers will discharge to existing treatment plants and will serve approximately 189,000 inhabitants by 1989. The drainage system will have a positive impact on about 666,000 inhabitants, including the entire city of Tunis. The following table provides a breakout of the proposed allocation of funding for the various construction elements included in the overall Greater Tunis Project;

TABLE 9

CONSTRUCTION ELEMENTS OF OVERALL GREATER TUNIS PROJECT	
Construction Element	Percentage of financing
1. Primary Sewers	11%
2. Secondary Sewers	8%
3. Recalibration (inner city)	12%
4. Household connections	5%
5. Primary and Secondary Drains	14%
6. Main Storm Drainage Canals & Retention Sites	50%
Total	100%

As in the Thirty Cities Project the entire construction program of this Project will be implemented in accordance with the most recently updated (1982) versions of designs and plans prepared by ICN. These plans have been found to be acceptable by both the KDF and RHUDO/Tunis for the purpose of implementing this Project. A foreign A&E firm, financed by the project, will provide technical assistance to ONAS in the overall construction and financial management of the Project. Nonetheless, ONAS will be responsible for the implementation and technical supervision of the construction elements of The Greater

Tunis Project. HG sub-project funds will finance work at only four of a total of eleven sites which will be covered by the overall Greater Tunis Project. Subproject funds will be used to cover only that percentage of the local and foreign currency costs of specific construction elements (i.e. primary and secondary sewers, stormwater drainage, and the recalibration of sewer and drainage lines of the inner city of Tunis) which directly benefit low-income population groups which are qualified for HG Program financing.

B. FINANCIAL ANALYSIS:

1. Sites and Services Subproject; This subproject will utilize HG funds in the amount of \$14 million. It is estimated that approximately \$4.5 million will finance development of up to 3,550 housing plots and approximately \$9.5 million will finance self-help construction of a similar number of housing units. These funds will be managed by the CNEL to prefinance AFH's development costs and to extend mortgages to low-income beneficiaries. Such mortgages will be used to finance the cost of purchasing serviced housing lots of 100-120 m<sup>2</sup> and to finance the costs of constructing 25 m<sup>2</sup> housing unit.

At present, no institutional prefinancing system of land acquisition and development exists in Tunisia. Therefore, prior to the initiation of a land acquisition and site development program, AFH must secure advanced payments from prospective land purchaser to finance the development of housing sites. The prefinancing mechanism proposed in the HG Project will enable AFH, for the first time, to expand its programs to reach low-income beneficiaries and speed up the process of land development.

Under the HG Project CNEL will advance AFH, on an agreed upon schedule, up to \$4.5 million to cover the cost of acquiring and developing the land. AFH has already incurred the cost of purchasing the required land, therefore with the CNEL advance, AFH will have sufficient funds to immediately launch infrastructure construction for the sites and services on up to eight sites which have been selected for the HG Project. As a result of this prefinancing mechanism the developed sites will be delivered to the qualified low-income beneficiaries at the time a contract for a CNEL mortgage is completed. Once the sites are developed CNEL will offer beneficiaries a single mortgage loan. Such mortgages will consolidate the amount advanced to AFH with the amount needed to finance construction of the low-income housing unit. CNEL will be able to draw on \$9.5 million in HG funds to provide the resources necessary for the housing construction component of the mortgage loans.

a. Costs and Financing terms to Beneficiaries; It is estimated that up to TD3000 (\$4,200) per beneficiary household will be needed to cover the costs of land acquisition and construction of a 25 m<sup>2</sup> core housing unit. The price of a serviced lot is estimated to range between TD700 - TD1,080 (\$980 and \$1,512) depending on the size and cost of land development. Included in the calculations of the land

prices are costs for land acquisition, site development works, engineering studies, administrative overhead and interest charges on the advance provided to AFH during the period of land development. Construction cost estimates are based on a rate of TD70 - TD80 (\$98 to \$112) per m2 or up to TD2,000 (\$2,800) for a 25 m2 housing unit. Based on these estimates, loans to beneficiaries will vary in size from TD2,430 to TD2,700 (\$3,402 to \$3,780). The actual loan amounts available to beneficiaries will be based on affordability, plot size and construction area.

Financing terms for the qualified low-income beneficiaries will require a 10% downpayment on the total cost of the serviced site and the costs of construction of a 25 m2 unit. The loans will represent 90% of the total costs and will be recovered at 7% interest over 15 years with a 2 year grace period on principal. The Grace Period will encompass the time required by the individual beneficiaries to construct the housing units. CNEL will receive a management fee of 1% on disbursements and an incentive fee of 2% on the amounts it recovers. CNEL will disburse funds on the following schedule:

TABLE 10  
DISBURSEMENT OF CNEL LOANS

TIME OF DISBURSEMENT	PERCENTAGE OF MORTGAGE
Initiate construction	25%
Completion of foundation	25%
Completion of walls	25%
Completion of roof	25%
Total	100%

b. Pricing Policy and Cost Recovery; The full cost of land and housing construction will be recovered from the beneficiaries of the Project. The prices set for land will include all costs associated with acquisition, development, administration and financing.

AFH's present regulations on land pricing do not allow it to charge different prices for sites within the same subdivision. The same per square meter price is charged for all lots in a subdivision regardless of size. These regulations and procedures have limited AFH's ability to cross-subsidize low-income beneficiaries by charging higher prices to higher income groups. They have also discouraged experimentation with the provision of different land development standards within the same subdivision. AFH is aware of the need to revise this policy. The Agency is trying to change existing regulations to allow cross-subsidies to occur between different subdivisions within particular large urban centers. At present, to reduce the cost of

serviced sites, AFH has agreed to reduce the size of the plots which it develops and offers for low-income beneficiaries. Under the HG Project AFH will for the first time offer a 100m<sup>2</sup> plot as part of its program for developing land in interior cities.

In order to allow AFH to replenish its land stock on a continuing basis, AFH in January 1984 began to revise the system to allow land prices to reflect the replacement value of land rather than the actual price paid. This measure will be applied in pricing the sites to be financed under the program.

c. Subsidies; The mortgage loans are to be offered to the low-income beneficiaries at an interest rate of 7%. This rate is below the rate at which the GOT will borrow the HG funds. However it must be noted that the 7% interest rate, while not positive given an estimated annual inflation rate in Tunisia of 8%, is the highest rate charged on shelter loans in Tunisia. Under CNEL's regular program, which normally reaches only above the median-income groups, the interest rates for mortgages are provided at the heavily subsidized rate of 4.5% which includes a 1% subsidy above the cost of funds to CNEL. On the other hand, interest rates on commercial loans in Tunisia, range from 10% to 12%. The Central Bank discount rate is between 7% and 8%.

While there does seem to be room for an increase in housing sector interest rates in general, it is not being suggested that interest rates in the housing sector should reflect the cost of Housing Guarantee funds but that they should move to reflect the cost of funds in Tunisia and that they be above the inflation rate for subsidies to be eliminated. To date the GOT has only allowed higher rates to be charged on IBRD and AID assisted shelter program loans. Both of these donors have followed a policy aimed at encouraging the GOT to gradually increase interest rates. AID has begun and intends to continue a dialogue with the Ministry of Housing on the issues of subsidies and interest rates. The RHUDO in July 1983, at the request of the Minister of Housing, funded technical assistance designed to initiate a review on the issue of subsidies for the Ministry. This study's preliminary analysis and recommendations have provided a guideline to a more in-depth review of shelter financing and subsidies being undertaken by the IBRD which also shares AID's concerns on subsidies. The Minister of Housing has recently indicated to RHUDO that, based on the recommendations of the RHUDO funded report, he intends to press for increases in CNEL's general lending rates. Under the Third Urban Project, the IBRD has reached an understanding with the GOT that mortgage rates will be increased to more positive levels by the end of 1987.

d. Costs and Affordability; A review of a variety of available options has revealed that the proposed program provides the most affordable formal shelter option for the provision of mortgages to urban low-income beneficiaries. The most inexpensive housing unit

presently being provided under formal GOT shelter programs is a TD6,000 (\$8,400) expandable unit. This unit is well beyond the reach of 50% of the urban population of Tunisia. Currently the least expensive serviced site offered by AFH costs between TD1,400 to TD2,000 (\$1,680 to \$ 2,800). This amount is to be prepaid over an 18-24 month period. It represents up to one year income for households earning the median income or to 2 years income for households earning the minimum wage.

Under the proposed program, the required downpayments on the least expensive options (TD2,700 or \$3,780) by beneficiaries will not exceed the equivalent of three months income for household earning the minimum wage of TD85 (\$49). Assuming that 25% of income is devoted to housing expenditures it is estimated that this option will be affordable by approximately 75% of the urban population. Recent IBRD surveys of low-income urban population groups in the interior of Tunisia, indicate that prospective beneficiaries are willing to spend up to 25% of their income for the combined costs of acquiring serviced plots and constructing housing units.

Table 11 provided below gives a breakdown of the various cost options for sites, loans required and the percentile of the Urban Income Distribution that is reached.

TABLE 11  
AFFORDABILITY ANALYSIS FOR CNEL LOANS  
(all costs are in Tunisian Dinars)

AMOUNT OF LCM	DOWN-PAYMENT	MONTHLY PAYMENT TD	MONTHLY INCOME REQUIRED	NATIONAL URBAN INCOME PERCENT REACHED 1984
2,430 (100m <sup>2</sup> plot-7TD/m <sup>2</sup> )	270	21.84	88.	26
2,520 (100m plot-8TD/m <sup>2</sup> )	280	22.65	91.	27
2,556 (120m <sup>2</sup> plot-7TD/m <sup>3</sup> )	284	22.97	92.	27
2,610 (100m <sup>2</sup> plot-9TD/m <sup>2</sup> )	290	24.45	94.	28
2,664 (120m <sup>2</sup> plot-8TD/m <sup>2</sup> )	296	23.94	96.	28
2,700 (100m <sup>2</sup> plot-10TD/m <sup>2</sup> )	300	24.27	97.	29
2,772 (120m <sup>2</sup> plot-9TD/m <sup>2</sup> )	308	24.92	99.7	29

NOTE: a) Down Payment of total cost. (b) On Plot construction: 25m<sup>2</sup>. (c) Construction cost: 80 TD/m<sup>2</sup>. (d) Terms of loan: 15 years at 7% with 2 year grace on principal. (e) Monthly payment not to exceed 25% of monthly income.

2. Urban Upgrading Subproject; During the design of this subproject an analysis was made of ONAS' progress to implement a full cost recovery policy in sanitation and of ONAS's financial position. This analysis concluded that the GOT should provide HG Program funding for the proposed ONAS project as a grant and not as a loan.

a. Cost Recovery Policy; The GOT had established a cost recovery policy for ONAS which was aimed at the achievement of financial self-sufficiency by the end of the VIth Plan Period (1987). Tariffs were to gradually increase to a level which would reflect the long-run incremental costs of providing sewerage services and by 1987 GOT's Direct Compensatory Payments to ONAS were scheduled to be phased out. These Direct Compensatory Payments were viewed as legitimate ONAS revenues, due to the GOT's decision to compensate ONAS with a portion of the revenues generated from increased land values that resulted from the ONAS clean-up operations in Lake Tunis.

The Project Design Team in reviewing the financial objectives of ONAS set in agreement with the IBRD, suggested that they were considerably more stringent than those under which most U.S. public authorities operate. ONAS must rely almost exclusively on user charges as a source of revenue. Given this situation, ONAS, as a means of achieving its targetted financial objectives, has projected a 22% annual increase in revenues derived from user charges. This steep rise, in real terms, in revenues depends on annual increases in tariffs of about 8.5% with a substantial increase in the number of users over time.

ONAS, however, has experienced delays of about 2 years in the implementation of scheduled increases in tariffs (i.e. present tariff levels are at the projected 1982 levels). This in turn has delayed ONAS's prospects of achieving financial self-sufficiency by 1987. The delays in implementation are due to the difficulty ONAS has faced in getting GOT approval for the projected increases in user charges. The tariff levels that were approved have reflected a much slower rate than ONAS originally projected it needed if it was to achieve financial self-sufficiency by 1987.

The Team concluded that the difficulties ONAS is facing as a result of delays in implementing this policy are considered to be short-term and needed to be viewed within the context of ONAS achievements. Despite delays, ONAS has moved away from the heavily subsidized, minimal cost-recovery system which exists in towns where sewerage systems are operated by municipalities towards a policy where user charges pay for the cost of services. Tariffs were increased twice in 1982 which indicates a definite resolve on the part of the GOT to support the policy of cost-recovery within the framework of the realities of the political and social environment of the country.

b. Financial position of ONAS; The delay in increasing the tariffs rates has seriously affected ONAS' financial position. The immediate effect of these delays is that the GOT will likely have to continue its Compensatory Payments for a longer period and at a higher rate than originally projected. At that time these payments will in effect become direct subsidies to ONAS rather than compensatory payments.

The Project Design Team's analysis concluded that unless the present policy of delaying tariff increases is changed ONAS will be unable to meet its debt service obligations on existing loans until 1990. In addition, ONAS will be prevented from accepting any additional loans if the organization is to come close to implementing its projected program of operation, maintenance and future investments. The analysis concluded that the impact of increasing ONAS' debt burden, as a result of requiring ONAS to borrow the HG funds even at nominal rates of interest, will be to substantially inhibit ONAS' ability to achieve financial self-sufficiency within a reasonable period of time.

As part of the effort to thoroughly investigate the possibility of providing HG Program funds to ONAS as a loan, the Project Design Team reviewed an alternative of cutting back on the projected ONAS investment program. The conclusion of that analysis was that the economic price of such a reduction in ONAS' investment program is too high. This price would include the cost of safeguarding previous Sewerage Sector investments and investments made in directly productive industries, as well as the costs associated with poor health, environmental degradation and reduced land values. Therefore further delays in the projected ONAS investment program are not only unjustified but are in fact viewed as being counterproductive in terms of the long-run economic objectives of the GOT.

c. Revenues and Cost Recovery Procedures; ONAS revenues come from the following sources:

- User charges and maintenance fees,
- Connection fees,
- Municipal tax receipts,
- Direct Compensatory Revenues, and
- Sale of by-products and services.

The 1982 percentage distribution of ONAS revenues from the above variety of sources reveals that user charges and connection/maintenance fees amounted to the largest single source of ONAS revenues (38%), followed by government compensatory contributions (34%) and municipal tax receipts (23%). Sale of by products and services amounted to only 5% of revenues. User charges and connection maintenance fees are expected to grow in importance and are projected to increase to 71% of revenues by 1987 when direct compensatory payments are to be phased out.

d. Tariffs; Average annual revenues of ONAS do not at present cover the long-run average incremental financial cost of providing sewerage service. To resolve this problem ONAS has initiated a cost recovery policy aimed at maintaining its financial integrity while ensuring affordable service for lower income users. To achieve this objective ONAS, in October 1982, modified its average tariff structure for the second time in a year in order to increase charges to all but customers with the lowest rates of water consumption. This new tariff structure is applied equally to all towns served by ONAS. As a result of these two increases in 1982 tariffs were increased by about 98% in real terms. Between 1982-1989 average tariffs were expected to increase by about 8.5% per year (see Table 12). However, ONAS has been unable to secure further increases after the rather steep increases set in 1982.

Representatives of both the IBRD and AID have discussed with the GOI and ONAS The financial implications of a continued delay in implementing additional increases in ONAS's tariff rate. It is clear to all parties that ONAS will be unable to comply with the IBRD loan covenants unless such increases are approved by the GOI. The IBRD, in a June 1984 Report (See Annex M ) anticipate that the tariff rates will be increased by October 1, 1984 and that ONAS will therefore be in compliance with the IBRD covenants.

TABLE 12

ACTUAL AND PROJECTED AVERAGE TARIFF RATES  
\* (TD/M3)

Year	Actual					Projected**						
	78	79	80	81	82	83	84	85	86	87	88	89
*Average tariffs per M3	.014	.030	.031	.033	.071		.105	.120	.141	.160	.180	.205

\*\*Note: These project levels of increase are necessary to maintain ONAS' financial objectives.

Table 13 below provides an indication of current tariff rates of ONAS for different groups of customers/beneficiaries.

TABLE 13  
CURRENT ONAS TARIFF RATES

Category	Water Consumption (m <sup>3</sup> /3 months)	Fixed charges (TD/3 months)	Surcharge (TD/m <sup>3</sup> )
<u>Domestic</u>	0 - 20	0.750	-
	20 - 40	0.750	0.020
	40 - 70	1.000	0.045
	more than 70	2.000	0.065
<u>Touristic</u>		2.000	0.150
<u>Industrial</u>		2.000	0.065 - 0.105

In addition to the tariff charges for the use of the sewer lines, ONAS also levies a Property Area Assessment charge to cover the cost of installation of the secondary and tertiary distribution systems and charges all users for the full cost (labor and material, plus 10%) of connecting a household to the system. As of 1983, ONAS started recovering the full cost of the secondaries and tertiaries from all neighborhoods in which it worked. The only costs of the system which ONAS does not recover fully from beneficiaries are the costs of primary sewers, drains, treatment plants and overloads. These are recovered only in part from ONAS monthly revenues. Most of the cost, however, is paid for through its investment budget. To ensure that households connect as required and to ensure that low income groups are not penalized, ONAS extends five-year credit to its customers for the payment of the connection fee and the Property Area Assessment. Consumers are charged interest on these credits at the current bank interest rate plus 0.5%, and repay in quarterly installments. The interest rate charged as of October 1983 was 11.5%.

In conclusion ONAS tariff and financial practices are based on sound principles of financial management for sewerage authorities. It has in its brief period of operation managed to initiate a policy of cost-recovery from users for sewerage services, and has progressed far beyond the practice found in areas where ONAS does not operate. Current ONAS cost recovery and financial practices are in fact fully

within the AID Policy guidelines regarding AID support of water supply and sanitation systems which stipulates recovery of recurrent costs and even provides an exception to full cost recovery for poor households. ONAS already recovers operations and maintenance costs and charges all users the full cost of secondary and tertiary installations.

C. ECONOMIC ANALYSIS: As part of the Project Design Process two economic issues specific to the use of HG funds to support GOT programs in the Sanitation and Housing Sectors were addressed. These issues were whether these investments are justified in Tunisia in light of increasing GOT budget deficits, and whether the GOT should borrow HG Program funds to finance portions of the VIth Development Plan.

1. Summary Economic Rationale for GOT investment in Sanitation Sector; Tunisia's VIth Development Plan objectives are to increase employment, reduce regional disparities and maintain a balance of payments equilibrium. In light of the Plan's development objectives and the GOT's existing balance of payment constraints, the GOT has been forced to cut back on projected investments in infrastructure and capital intensive industries.

The only exceptions to these cut-backs in projected investments has been the level of investment in water supply and sewerage. The Project Design Team's analysis concluded that the increased level of GOT investments in the Sanitation Sector (i.e. TD121 million, \$169.4 million) is justified as a means of protecting earlier GOT investments in directly productive industries and assisting the GOT in its efforts to redress previously existing regional maldistribution of its investment benefits. In addition, given the lag in coverage between improved water/supply and improved sewerage services, these increased investments are necessary if dire environmental and health problems, in the growing urban areas of the nation, are to be prevented and scarce water resources are to be protected. Therefore there is a strong economic rationale for maintaining proposed levels of funding in the Sanitation Sector. This rationale is based on evaluation of the costs which the economy would incur by not making investments at the present time. These future costs can be summarized as increased costs for water supply, in terms of exploitation of scarce resources, cleaning up polluted water resources and the environment, ill-health of the population, loss of revenues from land, tourism and industry and a decline in land values.

Any economic justification for Sanitation Sector investments must take into account the fact that, unlike commercial investments, sanitation projects require large amounts of capital at the start. A sanitation system must be built with capacities well in excess of the demand in the early years of the system's life if it is to be cost-effective in the long-run. The real benefits from such a system normally accrue in the later years of the system's estimated 40 year life cycle. At that time the system begins to function close to its full capacity level.

Therefore, the return on such investments is measured as the ratio of benefits received versus the initial cost of capital and the accrued cost of operation over the life of the system. The tariffs applied in such sanitation systems should equal the long-run incremental cost of providing the services.

The Project Design Team's analysis of the Cost/Benefit of the system in Tunisia suggests that under the Greater Tunis program, at a 4% discount rate for benefits and costs (a reasonable rate for sewerage programs) the tariffs by 1988 will be equal the long-run incremental cost of providing sewerage services. In addition, an IBRD analysis in connection with the Thirty Cities Project discounted the overall ONAS program benefits and costs at 10%. This analysis concluded that if revenues, from sewerage systems, are taken as a proxy for benefits, the rate of return on ONAS' investment program will be at least 10% without taking into account the long-term benefits associated with improved health, higher land values and a healthy environment. The lower discount figure used in the AID analysis on the Greater Tunis program is based on the fact that most of the costs of the program are for the provision of drainage systems which do not produce revenues. Therefore, given a continued effort on the part of the GOT to increase tariffs, it can be concluded that there will be a long-term positive return on the proposed investments in the GOT's sanitation sector projects.

2. HG Loan Effects on Debt-Service and on Investment Budget; Tunisia has recently experienced a rapid deterioration in its Current Accounts. Deficits have nearly doubled as a percent of exports and the Debt/Service ratio has increased from 11% in 1979 to 17% in 1983. As capital inflows have declined, the GOT finds itself in a position where it must secure additional foreign assistance and borrow capital to meet its investment targets. Keeping the Balance of Payments problems at a manageable level in the future will require that the GOT secure additional capital assistance at comparatively favorable rates.

The Project Design Team's analysis suggests that the HG Program loan at either variable or fixed rates is comparatively favourable with other sources of foreign financing. The fixed rate of 13.95% which was previously negotiated for the HG loan for the Flood Reconstruction Program in Tunisia is competitive with Eurodollar floating rates and is about 2 points above the IBRD's current floating rate. In addition, the longer terms negotiated for HG loans make them attractive to the GOT, since the government as a result of these loans will be required to assume a lower annual debt servicing obligation than it might otherwise be forced to accept. Therefore the impact of a HG loan on Tunisia's debt service obligations will be minimal, in that the repayments on a fixed rate HG loan will increase the GOT's debt service by less than 2% annually and by slightly more than 1% if the HG loan is made at a variable rate.

In the context of the GOT's VIth Development Plan strategy, the HG loan will not only be competitive, but will also serve as an appropriate

source of financing the GOT's investment budgetary requirements. The HG funds will be utilized in a program which furthers the GOT priorities of; (1) Employment Generation (i.e. Sites and Services and housing construction are both typically labor intensive activities), (2) Regional Development and Income Distribution (i.e. the program focuses on expanding benefits to secondary towns as well as Tunis and is targetted on low-income households). In addition, the HG funds will provide the GOT with the opportunity of meeting its short-term foreign exchange obligations, while financing a vital portion of its overall development strategy.

Therefore it was concluded that the projected GOT investment Program in the Sanitation and Housing Sectors is economically justified given the existing GOT budget deficits and that it is appropriate for the GOT to borrow HG Program funds to finance a portion of the costs of these investments (See Annex G(a-b) for detailed analysis).

D. SOCIAL SOUNDNESS ANALYSIS; The Project design takes into account a variety of socio-economic factors related to urban conditions in Tunisia. These factors include:

- increased demand for urban shelter services by the poor resulting in increased pressure on the existing neighborhoods and housing;

- disparities in access to urban shelter services particularly as they affect the urban poor concentrated in densely populated central city locations (medinas) and unplanned developments on the peripheries of larger urban centers and in small towns, and;

- unique disparities in household incomes.

In 1980, Tunisia's population of 6.3 million inhabitants was already highly urbanized with 55% of the residents living in urban areas. Urban growth rates were 4% per annum compared to an overall growth rate of 2% per annum.

The increased demand is generally due to in-migration, new household formation and rising incomes. While this demand has been generally concentrated in the coastal zones and larger urban centers, it is now also prevalent in secondary urban centers.

Formal sector programs have, despite increased production levels, failed to impact significantly on the housing demand of low-income population groups. The backlogs in the formal supply of shelter apply to both shelter production (housing units and land) and the provision of services. Informal shelter production has been the major means by which the population has traditionally housed itself. The major constraints to this type of housing is an insufficient supply of serviced land to meet future housing requirements and an insufficient level of services within existing areas.

1. Project Beneficiaries; The Project has been targetted on a total of 50,000 households representing an estimated 20% of the poor urban population. Implementation of the various components of the Project is expected to have a positive social impact by bringing about improvements which are socially accepted and meet expressed needs. The major benefits of the Project will be improved sanitary and health conditions in poor neighborhoods and an increased access for low-income groups to improved housing.

During the design of the Project an effort was made to target the proposed programs on poor urban population groups. The HG Program guidelines require that project components be targetted on improvements of specific neighborhoods that are characterized by slum conditions where residents' incomes are below the urban median. The Sites and Services Subproject is therefore specifically designed to impact on the needs of low-income population groups in the rapidly growing, least developed interior towns. The Urban Upgrading Subproject has also been designed to have a direct impact on these target beneficiaries.

Since it was not possible to visit all sites during the period of project preparation the selection process for the Sites and Services Subproject utilized available maps, aerial photos, demographic data and field visits to get a sample of the sites. In cities which had been surveyed by the National Upgrading Agency (ARRU), the Project Design Team attempted to insure that planned works covered HG sites which actually needed upgrading. These sites were evaluated and ranked for financing according to a number of categories which were selected so as to assess three measures of slum conditions; neighborhood or urban density, income and shelter conditions (See Annex H for ranking system). Table 1 in Annex H provides a ranking of potential HG sites and includes their major characteristics. A final selection of sites will have to await field visits to verify the ranking.

In the Greater Tunis Subproject all HG sites were visited and four were selected because they represented low-income areas that would directly benefit from the upgrading works. Sites excluded were either upper and middle income areas or were located where the proposed works contained major off-sites drainage canals whose direct impacts on the urban poor were difficult to estimate.

## 2. Shelter Conditions of Target Beneficiaries;

a. Thirty Cities Subproject; The beneficiaries of the Thirty Cities Subproject generally represent residents of two types of low-income settlements. First, the medinas of urban areas which are characterized by high densities, irregular street patterns, existence of physical service networks which are generally in need of rehabilitation, and low incomes populations. Second, spontaneously developed settlements which are characterized by a lower standard or a total absence of services and by a lower population densities than the medinas and where the quality of construction is poor.

According to a report prepared for the World Bank as part of the design of the Thirty Cities Project, an estimated 45% of the target settlements represent medinas and low-income spontaneously settled areas. The remaining 55% of the target settlements are the residential areas of the settlement's administrative and business center which include extensions of spontaneously developed areas with as well as areas of good quality housing which was planned by the Tunisian National Housing Authority (SNIT) housing. Within the sites selected for HG financed portion of the Project it is estimated that 60% of the dwellings to be served are in either old, low-income areas or in new, spontaneously settled zones.

It should be noted that these typologies are highly generalized and merely indicative due to the fact that the Project Design Team was dealing with cities of an average population of 16,000 inhabitants. The demarcation lines between lower-income spontaneously settled areas and extensions where good quality housing has been built are rarely clearcut. Nor are the residential areas of the administrative and commercial centers of the cities, clearly middle and upper income. It is worth noting that socially and economically heterogenous settlements are culturally appropriate in Tunisia.

Shelter conditions in the sites selected for HG financed upgrading are characterized by unsanitary conditions due to the absence or inadequacy of existing sewerage and drainage. Overflows from septic tanks are evident in the streets. Many of the towns have oueds in which raw sewage is dumped in close proximity to residential areas. In neighborhoods such as the medina of Bizerte, raw sewage backs up into the houses.

b. Greater Tunis; The sites selected for financing under the HG funded portion of this subproject represent the two types of low-income settlements described above. Firstly, the medina and secondly, spontaneously developed settlements. The medinas are characterized by extremely high population densities, (an average of 1,449 persons/hectar), low-income of residents, and rapidly deteriorating shelter conditions. The capacity of the existing housing stock and physical infrastructure are overloaded due to the high densities. While a variety of services are generally available to the residents within their neighborhoods, the quality of the physical services is poor due to the age of the systems, the increased densities and the difficulty of maintenance. The population in this part of the city is predominantly rural in origin and is employed in the services sector. Occupational categories show a large representation of day laborers, blue collar workers, artisanal laborers and the self-employed working in the services sector.

The second type of settlements is made up of smaller sites chosen for upgrading through the provision of sewerage or drainage. Two of these sites, Ain Zaghuan/Aouina and Sidi Daoud, are at an early stage of

development in the peri-urban northern zone of Tunis. These project sites are more densely populated than most clandestine developments. Ain Zaghuan/El Aouina with densities of 400 persons per hectare has no existing sewerage system despite the fact that an estimated 51% of the households are connected to the water distribution system. The population of these neighborhoods consists primarily of low-income residents who have moved out of other parts of the city (the medina, older spontaneously settled zones, and other central poor neighborhoods). The majority of income levels in this type of settlement are higher than those found in the medina or older spontaneous settlements but are still below the national median income. World Bank estimates of incomes in clandestine developments similar in urban structure to El Aouina and Sidi Daoud found that incomes range from TD30 to TD300 per month with a median of TD80. This is considerably lower than the Tunis median of TD174 per month.

In Sidi Daoud population densities are 180 persons per hectare and only 10% of the population is connected to sewerage. Flooding and overflows from cesspits are problems in both settlements. The older spontaneously settled zone of Afrane (Djebel Jelloud) has an estimated population of 15,000 and lacks any sewerage connections.

c. Sites and Services Beneficiaries; The beneficiaries of the Sites and Services Subproject are poor households in small urban centers located in the most rapidly urbanizing and least economically privileged regions of the country (i.e. Northwest, Center West and South). The distribution of the beneficiaries is 34% in the Northwest, 28% in the Center West region and 38% in the Southern region. The beneficiaries are generally households whose origins are rural. Urban employment in these regions is dominated by the Services and Trade Sector, Industry and Agriculture. The latter accounts for 10-20% of the urban employment in these three regions. The majority of the beneficiaries are likely to be self-employed, (i.e. not part of the formal economic sector of salaried employees) and therefore have not benefitted from formal housing credit programs of CNEL. The GOI program which will be financed by HG funds will take into account this group of the population and introduce it to a new formal program of credit and savings for land purchase and housing construction.

3. Beneficiary Household Incomes and Participation; Data on income distribution is available from the 1980 Household Budget and Expenditure Survey of the GOI. Taking household expenditures as a proxy for incomes and updating it by assuming a 4% growth in income per year, the distribution of urban income for 1984 is estimated at:

TABLE 14

URBAN INCOME DISTRIBUTION	
DECILE	TD/MONTH
1st	62
2nd	83
3rd	98
4th	115
5th	134

The above table indicates that 20% of urban households have incomes which are less than the national minimum of TD85 per month. In the smaller towns included in the project, these target beneficiaries make up an estimated 33% of the population.

The National Urban Median Household Income in 1984 is TD134 per month. An estimated 55-60% of the households within the upgrading and sites and services subproject areas are below this income level. In Greater Tunis, the median income is TD174 per month. However, within the subproject sites a majority of the population is estimated to be below the TD134 per month national median income.

Beneficiary participation in both of the HG funded subprojects is very probable. The serviced sites and housing credit provided under the Sites and Services Subproject will be affordable by households earning TD88. The sewerage charges which are an outgrowth of the implementation of the Urban Upgrading Sanitation Subproject are also affordable to the target low-income groups.

4. Program Impact;

a. Sites and Services Subproject; This subproject will impact on approximately 21,000 inhabitants of small towns in the interior regions of the country. This population represents between 10-30% of projected demand for housing by low-income groups during the VIth Development Plan period. (This demand does not include the requirements of the population groups below the absolute poverty threshold.) The population to be served by the Subproject would, in the absence of serviced sites, be forced to build informally on unserviced land at more peripheral locations. The consequence of this, apart from the poor sanitary and living conditions in such settlements, would be to increase costs to public agencies responsible for upgrading these areas. Therefore implementation of the Subproject will insure that the target population is provided with a higher level of services for a low cost to public agencies. As the sites to be developed are within socially integrated zones, the Subproject will in effect provide increased access to physical and social services for the low-income population groups.

The effect of extending credit for housing construction and land purchase to the target beneficiaries will be that low-income households will be able to build homes at a faster pace than they now can. Both the existing informal and formal system of land purchase require advance full payment for land. These system exhausts savings and households are forced to wait a number of years until they can accumulate enough new savings to begin construction. The informal construction process can take between 5 to 10 years as it is almost entirely dependent on accumulation of savings. Under the program proposed for HG funding the construction process of an initial unit will be completed within 2 years.

b. Greater Tunis Subproject; The areas covered by the extension of new sewerage systems will be 2,905 hectares with a projected total population of 194,000 people by the year 1988. The Subproject will provide a total of 26,000 people with approximately 4,340 sewer connections. This will increase the connection rate to sewerage in Greater Tunis to 94% of the total population. The construction of drainage works under the overall project will have a positive effect on a built-up area of 3,791 hectares. At the end of the Project construction period an estimated 500,000 people will be living within the areas to be served by primary drainage canals. Most of the drainage work consists of recalibration. The impact of this work will be felt over an area of 690 hectares where an estimated 100,000 people live.

c. Thirty Cities Subproject; The overall Thirty Cities Program will benefit not only the present but also the future populations of the targeted towns. Rehabilitation of existing sewers will improve service for the estimated population of 250,000 inhabitants who are presently connected to sewerage and the expansion of these systems will allow an additional 155,000 inhabitants access to community sewer systems.

The HG financed sewerage upgrading will cover approximately 1,000 hectares in fifteen towns. The major benefit will be for the 15,500 households people living in those areas which are presently without any sewerage systems. This population will have the highest benefits in terms of improved health and living conditions and in terms of a decrease in the cost of sewerage disposal. The additional connections made at the HG sites will bring overall service levels from the present low of 20% to a high of 60% by the end of the Subproject. The remaining households that are not connected will also benefit since many of these households rely upon water wells that are threatened with contamination due to the seepage from existing or unimproved future cesspools and septic tanks.

The benefits to health which will be effected as a result of the HG funded construction take two forms; (1) the present health hazards caused by the discharge of effluents in the town or in open ditches will be eliminated and (2) the risk of contaminating untapped future water resources will be reduced.

E. ADMINISTRATIVE ANALYSIS:

1. Sites and Services Subproject; Implementation of this subproject will be undertaken by two institutions, the Land Development Agency (AFH) and the Housing Savings Bank (CNEL).

a. AFH; The Land Development Agency (AFH) is the national agency responsible for acquiring sites, improving land, and selling serviced lots to public and private developers of housing and community facilities throughout Tunisia. The Agency was created in 1974 as a non-profit parastatal organization. AFH is authorized to assemble land intended for residential use, to subdivide, develop and sell land for housing to individuals or to housing developers. AFH also provides within its residential land development schemes, parcels of land for administrative and commercial use.

Under the aegis of the MOH, AFH is organized into nine principal line divisions. AFH is opening new field representative offices as part of its administrative decentralization program and its shift to projects in interior secondary cities. At present field offices exist in Bizerte, Siliana, and Sidi Bouzid. There are two regional branch offices in Sousse and Sfax which cover the Center and Southern Regions. Currently AFH has about 30 projects under construction and 63 projects under active planning. AFH employs a staff of 360 people, including about 70 senior professionals. The staff includes representatives of a variety of disciplines, yet there is great emphasis on engineers, architects, and urban planners. As a parastatal agency AFH attracts skilled technical staff at higher wages than the normal government scale. AFH has a capable staff and organization which is appropriate for its mandate and operation. It is able to prepare two-thirds of its subdivision site plans in-house. The remainder are contracted out to private Tunisian consulting firms.

To its credit, AFH creates communities that are economically, socially, and physically integrated, with provisions made for the full range of community facilities. AFH's projects range from small 1 hectare (2.54 acre) subdivisions to entire new towns, such as El Mourouj in southern greater Tunis, which has an area of 444 hectares (621 acres) planned for 12,000 housing units and a population of 67,200. Most of AFH's initial activities focused on metropolitan Tunis in response to demand. Beginning in 1980, however, AFH began undertaking projects throughout Tunisia so that it now is working in 85 of Tunisia's 126 municipalities.

Since its creation AFH has purchased 4,000 hectares and developed, 2,044 hectares with a total of 59,214 housing units, about 60% of which have been in Tunis. AFH has projects planned, from the present to the year 2,000, totaling 6,561 hectares with 189,780 housing units nationwide. These statistics indicate ambitious plans and demonstrate

both a need for significant financial resources for land acquisition and development, as well as a careful program to carry out national, regional, and municipal land development plans and priorities.

AFH recognizes that the push to decentralize its operations and projects will require changes in policies and practices. AFH is confident that adequate general contractors exist to carry out its program in interior cities, in part due to the existence of semi-public regional contracting companies (sociétés régionales d'entreprise) established by governors in several regions. Also, coastal contractors are likely to bid on AFH projects in the interior of the country.

A major limitation on AFH's ability to serve the low-income groups has been that it has had to rely on a paying market to acquire resources for land acquisition and development. Most of its efforts have therefore been targetted to serve middle and upper income groups who can afford to pay the cost of improved land through advance sales. This has naturally influenced the standards at which AFH develops land which are designed to attract this clientele. Most of its site development is for lots averaging 400m<sup>2</sup>. Its experience has been primarily in Tunis where demand on the part of middle and upper income groups is sufficiently high that prospective buyers are able to make substantial advance payments. It recognizes that the market outside the larger urban centers is different and that it will have to revise its practices to meet the demand in those centers.

-Organizational Practices; AFH organizational procedures depend on a coordination with municipal authorities and infrastructure agencies. Normally, it is the local authorities that initiate the request for AFH to enter the community and develop land. The municipalities rarely ask AFH to develop sites at minimal standards, though it is empowered to do so. Instead they expect AFH to develop the land at its conventional standards with the full range of infrastructure services (water, electricity and sewerage). AFH selects its sites within locations programmed for residential use in the locally approved Masterplans. The decisions on site selection is made in consultation with local authorities, and sufficient land is usually identified to meet the requirements of a 2 year production schedule.

Once the site is chosen AFH can exercise a full range of mechanisms such as preemption and expropriation. It is empowered to preempt the desired site along with a significant perimeter of surrounding land to avoid speculation. The prices paid by AFH for the land it buys are then established by commission. While the owners of the land can challenge the price, they cannot challenge the transfer of ownership. The process, however, is a lengthy one and is unpredictable. While AFH has power of "a quick take" (i.e. it can proceed with the development despite litigation over the price to

be paid), delays are experienced when it attempts to transfer disputed land to prospective purchasers. Because the expropriation process is cumbersome and lengthy, and the fact that capital available to finance land acquisition is limited, AFH generally limits its acquisitions to the projected mid-term needs. This essentially prevents the Agency from assembling sufficient land to meet increased future demand. The 'Land Needs Study' to be fund as part of the HG Project's technical assistance, will address these major constraints to an adequate land development program.

For an average site, AFH takes 17 months from the time of the request for the project to the beginning of infrastructure construction. During that time AFH must coordinate with the various utility agencies. AFH's record of coordination with other agencies is sound and no problems are foreseen in this regard. AFH typically takes 10 months to complete plans, approvals and contracts for civil works, then 12 months for infrastructure construction, with plot allocation and land sales taking two years from the time infrastructure begins. Under the terms of the AFH Plot Sales Contract, housing construction must begin within one year and be completed within two years of signing the contract. Even before development, the Agency establishes a price and pre-sells the land stipulating that the full cost must be paid in advance under its regular program.

- Financial Structure; AFH is essentially a non-profit organization. It was granted an initial capital of TD2 million (\$2.8 million) and has since borrowed a total of TD5 million (\$7 million) from the GOT to which was added an exceptional grant of TD 187,000. AFH financing has relied primarily on land sales for over three fourths of its revenues and investment capital. Its land sales are made at cost yet, as has been indicated, substantial downpayments are required which are used to defray the Agency's operating costs.

AFH has in the past borrowed very little money to finance its operations. The money it has borrowed from commercial banks is short-term and paid for at 10% interest, a charge which it passes on in the land sales price. More recently faced with budgetary deficits due to the delays in developing and selling acquired land reserves, AFH has started to borrow more extensively from financial institutions. AFH in 1984 received TD2.4 million (\$3.36 million) from CNEL as an advance and has approached the Central Bank for greater credit facilities. AFH has also been able to draw on a TD2 million (\$2.8 million) overdraft to pay land owners for the purchase of land.

A major constraint on AFH's operational capability is lack of long term financing coupled with a rather low-level of initial capitalization considering the task and objectives set for the

Agency. The absence of institutional long-term financing and the under-capitalization of the Agency has limited its ability to both purchase land and develop it at a sufficient level to meet demand. For example in all of 1982 and 1983 AFH acquired about 1,500 hectares. While this amount of land was less than the target objective of 1,000 hectares per year, AFH still experienced cash-flow problems in its 1984 operating budget and was unable to develop a sufficient amount of the land it held.

AFH's financial difficulties stem primarily from the fact that it relies almost entirely on prospective purchasers advance payments to finance its land development and acquisition. An estimated 92% of its assets (\$71.6 million) consist of land reserves and works in progress. This is matched by current liabilities including short term debt of \$68.6 million or 89% of its liabilities. The viability of AFH's financial position requires a quick turnover of land acquired. This however has not been the case. Delays have been experienced in developing land due to contractors not keeping to work schedules. Additionally, a proportion of AFH's land stocks in Tunis have remained idle due to litigation over land-use. The project's introduction of a prefinancing mechanism will allow AFH to overcome what it regards as its major operational constraint. Both CNEL and AFH have already considered the possibility of initiating a program whereby CNEL prefinances AFH activities. The project outlined in this Project Paper will demonstrate the viability of this approach.

b. CNEL; CNEL was established in 1974 as a housing savings bank, with the role of mobilizing domestic savings for the production of housing. It functions as a public autonomous agency under the aegis of the Ministry of Finance. The Board of Directors of CNEL includes representatives from the Prime Minister's Office, the Ministries of Finance, Plan, Social Affairs, Housing, Transport and Telecommunications and the Central Bank of Tunisia.

CNEL's main housing finance activities are conducted through its housing/savings contracts. It offers attractive savings terms to households subscribing to this Program. These contracts are established for specific amounts with subscribers saving a third of the contract amount (including accumulated interest) over a period of either 4 or 5 years. The savings contracts are offered to allow the accumulation of the downpayment necessary to purchase units costing from TD4,000 to TD13,000 with the loans available on contract maturity. The annual interest rate on the loans is 4.5% (which includes a subsidy of 1% on cost of CNEL financing) paid over 10 years for subscribers to the four-year savings program or 15 years for the five year saving program. Savers are paid 4% on their saving plus a savings bonus of 2% paid annually by the GOT provided they complete their contract savings period and take out a loan.

Another program administered by CNEL is FOPROLOS (Fonds de Promotion de Logement aux Salaries), a government fund financed with a 2% levy on wages created to help low-income salaried individuals to gain access to the housing market.

In interior cities the number of CNEL savers is limited as are the number of salaried individuals. Therefore the two CNEL programs that serve low-income groups have previously had a limited impact on the target beneficiaries of the proposed sites and services subproject.

- Financial Structure; CNEL is a well managed institution. It has consistently shown a profit. Its expenses are kept at a reasonable level and generally reflect a conservative financial policy. Having started with an initial government grant of TD420,000 (\$580,000) it has accumulated reserves of over TD6 million (\$8.4 million). Its main resources come from savings contracts presently estimated at TD100 million (\$140 million).

CNEL has been extremely effective in mobilizing domestic resources. Whereas its initial objective was to attract 8,000 savers a year, it has managed to attract savers at the rate of 12,000 new savers a year. However, its major shortcoming has been that it has not been able to grant a sufficient number of loans as savings contracts mature. The effect of inflation on the price of housing makes it difficult for savers to finance their homes under the terms of their contract. Additionally, the number of contracts maturing has begun to exceed the rhythm at which the Public and Private Sector developers can produce housing, again in part due to land constraints and costs of urbanization. In 1984 an estimated 22,000 savers will have completed their contracts and be eligible for loans. Yet, it is unlikely that CNEL will be able to grant that many loans.

The proposed housing credit for land purchase and construction Subproject will capitalize on AFH's capacity to provide land and will encourage CNEL to finance construction mortgages rather than mortgages for completed units. This would be beneficial in two ways, the costs of privately built units would be lower, and the construction period by the Private Sector would be shorter as it would no longer depend on advance savings to purchase the land and construct units. Additionally, such a change in emphasis would help CNEL to reach lower income clients than it has been able to serve through its regular programs which are limited to take-out financing on turn-key projects.

Both of these organizations, AHF and CNEL, are well staffed and are capable of implementing and monitoring all aspects of the HG funded subproject.

2. Urban Upgrading Sanitation Subproject; The major institution responsible for implementing this Subproject is ONAS, the National Sewerage Authority which was established in 1974.

a. Organizational Structure and Management; ONAS has the status of an industrial and commercial public company with financial autonomy. The Board of Directors, presided over by ONAS' General Manager, consists of representatives of GOT Ministries and agencies involved in the public water and sewerage sectors, the municipalities and ONAS' customers. The members of this Board, appointed by the GOT, supervise ONAS activities. Overall control by the GOT, apart from appointment of Board members, consists mainly of approval of ONAS investment plans, borrowing and tariff levels. Daily operations are handled by two departments for new works (one for Greater Tunis and the other for the rest of the country), the department for Planning and Studies, the department for Operation and Maintenance, and finally the divisions of finance and administration.

Available evidence suggests that ONAS is an evolving, increasingly effective organization. ONAS exhibits a remarkable ability to integrate politically sensitive income distribution issues with a need to establish a sound financial basis to pay for investments and operations. ONAS will eventually assume responsibility for wastewater disposal in all towns of 2,000 or more inhabitants. At the present time it is in the process of taking over the sewerage systems of municipalities of 10,000 inhabitants or more. With experience and improved management capabilities, ONAS will continue to increase its operational capabilities. This growth (i.e. improved capability to handle increased responsibilities for sewerage flows) is projected to continue through 1990 at 9.5% annually. While this rate of growth might be higher, it does reflect positively on ONAS' future ability to assume an increasing responsibility for sanitation and documents the organizations' overall effectiveness.

b. Personnel Recruitment and Training; Since its establishment ONAS has moved rapidly to recruit and train personnel capable of administering and operating a public sector agency, as well as designing, installing and maintaining a sanitation system. Since ONAS has been able to offer its staff the same salary structure and benefits (e.g. low interest housing loans) as other agencies, as well as the possibility of rapid advancement in a fast growing organization, it has had no difficulty recruiting and retaining competent staff. When first established, ONAS relied heavily on foreign technical assistance to train personnel, conduct studies, manage projects and supervise the system. In some areas, such as the supervision of treatment plants and the completion of design studies, foreign technical assistance is still required. In general, however, the level of foreign involvement in the operations of ONAS has decreased and the capacity of the organization to train its employees has increased.

The total number of ONAS personnel has grown an average of 12% per year. Having started with approximately 170 personnel in 1975, ONAS currently has a staff of more than 1,600. Indications are that ONAS has a low staff turnover due to the existence of effective training programs and promotion.

During sites visits by the Project Design Team it was noted that ONAS supervisory personnel working with private sector contractors appeared knowledgeable about the technical details of the projects and in complete control of installation and maintenance activities. As sewerage treatment is the most demanding and difficult technical part of the ONAS operation, it was particularly encouraging to observe that the plant managers appeared to be fully competent and to take considerable pride in the successful operation and appearance of their plants. It should be noted, however, that the equipment and the plant sites visited came from three different industrial countries, Sweden, Switzerland and France and that ONAS may find it difficult in the future to operate at a uniformly high level with such a range of equipment.

As a whole ONAS as an institution has made great strides since its inception and is continuing to improve its capacities and should be able to successfully implement and administer the program.

c. Organizational Procedures; ONAS technical procedures and capacity for installing new systems are addressed in the Technical Analysis. ONAS' responsibility, apart from supervising construction and assuring the quality of work performed by private contractors, is to maintain the system in place. For the sewage collection systems, ONAS is responsible for all conduits leading from the boite de branchement, the individual household connection. Maintenance of internal house piping up to the boite de branchement is the responsibility of the customer. The Design Team concluded that maintenance of the collection systems and treatment plants is performed by ONAS personnel on a regular schedule. Maintenance records are well kept, especially for the treatment plants where maintenance follows manufacturer's specific instructions.

F. ENVIRONMENTAL ANALYSIS: An extensive analysis of the environmental impacts of the proposed Project Amendment was completed and a detailed report is in ANNEX G-c. Below is a summary of the conclusions reached concerning both of the HG Subprojects.

1. Sites and Services Subproject; The Project Design Team visited a number of sites which have been developed previously under the AFH Program. In addition, as outlined in the Technical Analysis Section, the Team carefully reviewed the construction plans and procedures used by AFH in the past and those which will be used to implement the HG funded subproject. All sites are on flat lands and should pose no drainage

problems. Most of the sites provide the possibility of connecting to the ONAS sewerage system. Where no such possible connection to ONAS systems exists, septic tanks or cesspits will be built. In these cases the population densities to be developed on these sites are low enough to make such alternate systems a feasible option.

## 2. Urban Upgrading Sanitation Subproject:

a. Wastewater collection; In cities where ONAS operates, every house and every building is required by law to connect to the ONAS system. The system is designed to collect 80% of the potable water delivered. The ONAS system begins at the household connection (boite de branchement) and continues, usually following a natural basin, through the secondary and primary lines to a disposal point, an ocean outfall, an oued, a field or a treatment plant.

Comments: ONAS has two operational objectives in wastewater collection. They are: (1) to rehabilitate and maintain in good working order the municipal systems built during the colonial period, and (2) to do regular maintenance on the systems built since Independence. Maintenance is an area of concern. In its rush to establish the national network, maintenance is sometimes given less attention than necessary. ONAS is aware of the danger of neglecting regular maintenance and based on field visits to ONAS sites and review of exist record and future plans, the Project Design Team concluded that there is sufficient evidence to indicate that ONAS is at present and will in the future continue to perform adequately in this vital area of concern.

b. Wastewater treatment; ONAS has carried out extensive analysis of the quality and volume of industrial and household wastewater generated in Tunisia (See Annex G-c). The treatment methods currently employed, or soon to be available through the implementation of the Thirty Cities Project are: low activated sludge, trickling filter, lagoons and spreading. By employing these treatment methods ONAS removes solids and BOD5, protects receiving waters from toxicants and controls coliforms.

Comment; ONAS has carefully studied wastewater treatment demands in Tunisia. Conscious of the needs to protect scarce water sources and ensure public health, ONAS has invested in those treatment methods that secure the desired objectives using the least cost solution. (See Technical Analysis) In general, treatment plants are designed and built by foreign firms who also train staff and monitor the operations of the facility during the post construction period. The plants visited by the Team appeared to be well run by ONAS staff.

c. Wastewater disposal methods; Whenever possible, treated wastewater is drained to the sea. However, since Tunisia is a water poor

country, wastewater is used for irrigation according to criteria defined by the The World Health Organization (WHO). Such reuse is carefully monitored by the Ministry of Public Health. Since Tunisia does not at present have sufficient treatment plants to handle all wastewater currently generated, some wastewater (it is difficult to quantify the exact volume) is dumped untreated into oueds, rivers and even the sea. When implementation of the Master Plan for Sanitation is complete (the year 2006), the current unsound dumping practices will have been corrected.

Comment; Disposal of untreated wastewater is a long-term national problem. Implementation of the Thirty Cities Project is one of the initial steps that the GCT has undertake to solve this problem. Other programs are planned for the future and it is projected they will be completed by the year 2006. Presently close monitoring of wastewater disposal is successfully done by the Ministry of Public Health which has initiated (1) a program to educate the general public on the dangers associated with using wastewater, and (2) promulgates and enforces strict rules against its reuse.

d. Reuse of treated wastewater; ONAS sells all treated wastewater to the Ministry of Agriculture. By GCT decree treated wastewater may not be used for irrigating vegetables and forage. However, irrigation of orchards is permitted.

Comment; ONAS cannot and does not offer treated wastewater to all who want to buy it. Only the Ministry of Agriculture can purchase and reuse wastewater produced by ONAS. This practice ,when combined with the Ministry of Public Health's effective program of monitoring the disposal of wastewater, insures that wastewater reused is controlled.

e. Monitoring of the reuse of wastewater; Strict guidelines are in effect and regulate the reuse of treated wastewater. These were developed by ONAS and the Ministry of Public Health. These guidelines are enforced by sanitary agents who perform weekly laboratory tests on the wastewater and periodically examine personnel working at treatment plants and those using treated wastewater for orchard irrigation.

Comment; ONAS plans to strengthen its monitoring program as more treatment plans come on line. Additional personnel will be hired and trained as health agents and laboratory personnel. The current practice, in which the Ministry of Public Health monitors reuse, gives an independent confirmation that the application of the treated wastewater is appropriate.

f. Solid waste collection and disposal; Solid waste collection and disposal is the responsibility of individual municipalities. In general, solid wastes are collected and transported regularly to dump sites. Collection methods range from modern dump trucks to hand-pulled carts. Solid wastes are held at dump sites, usually good distances from residential centers, and periodically buried or burned.

Comment; The municipalities appear to do an adequate job of collecting and disposing of solid wastes. However, at times during heavy storms refuse improperly dumped by residents is flushed into the ONAS sewer/drainage lines and creates a problem. Such storms, however, are infrequent, and, in any case, this problem can only be fully removed by public education programs and more frequent collections. The GOT is aware of these problems and has agreed to gradually address them.

g. Storm drainage and surface drainage collection and disposal; The traditional combined (sanitary/storm) system built during the colonial period is still in use in Tunis and a few other cities. Systems completed after that period have separate storm and sanitary lines. In densely populated areas all storm lines are covered. Outside residential areas, the lines are open and constructed of concrete or shaped from earth. Storm drainagerunoff is handled by these combined and/or separate systems. Storm waters are led to rivers, oueds, lakes or the sea. Since at times storm intensity is great the lines have reservoirs to catch runoffs.

Comment; Only the combined systems present environmental problems. In the dry season, runoff is not always sufficient to flush the systems' lines. In the rainy season, water from flash floods sometimes exceeds the capacity of the lines and creates backups in houses. ONAS is aware of the problem. Where combined systems are in place, regular cleaning or recalibration is planned and implementation to eliminate the problem is improving. The new systems coming online are always separate (i.e. independent storm and sanitary lines) and the problems mentioned above generally do not occur.

h. Maintenance procedures; ONAS is responsible for maintenance of the wastewater and drainage system. SONEDE addresses the water supply sector. Individual municipalities are responsible for solid waste collection programs. In general, the maintenance procedures of each group are adequate. In the case of ONAS, the agency most intimately associated with the proposed upgrading project, maintenance is of critical importance and recognized as such. ONAS must rehabilitate and maintain the aging systems that it has inherited from municipal authorities. At the same time, ONAS must maintain in good working order, the system it has installed over the last decade.

Comment; Although the current financial crisis facing ONAS has prompted some to recommend that maintenance cut backs might be used to save scarce funds, this is the one area of ONAS operation which cannot be reduced under any circumstance. In fact, adequate maintenance activities should be intensified. This fact is understood by ONAS and they have clearly stated that they will not cut back their operations in this vital area. When ONAS sites were visited by RHUDO consultants regular maintenance procedures had been scheduled and were being carried out.

3. Conclusions; An analysis of the practices used by AFH and ONAS prompts the following general observations:

a. The standard procedures utilized by AFH in past projects and the site development plans which will guide the development of the HG funded sites development, are acceptable and present no serious environmental problems.

b. Wastewater collection methods are conducted professionally, using the best technology available in Tunisia. The water-borne sewage system which is being installed as part of the proposed Project Amendment will protect the very fragile potable water balance that exists in Tunisia and demands the least cost technical support. All other technologies, (e.g. chemical and electrical systems) call for an unacceptable higher expenditures on energy and technology.

c. The treatment plant technology in use and being installed as part of the overall GOT program is simple in design and operation. It is the least demanding on energy.

d. The reuse of wastewater is restricted to only certain agricultural applications. Irrigation of orchards is acceptable and is closely monitored by the Minister of Agriculture while overall water quality is assured by the Ministry of Public Health. Given these precautions and the country's increasing demand on a very limited potable water supply, such applications are essential and acceptable within the Tunisian context. The Thirty Cities project includes financing for a feasibility study on reuse of wastewater for industrial and agricultural uses. This study is likely to provide recommendations for improvement of the present system.

e. Collection and disposal of solid waste is presently being done by municipalities in a relatively acceptable manner. However, the methods being used represent the weakest link in the sanitation chain. It has been suggested that this activity be transferred to ONAS or another centrally directed agency. At present, the GOT is unable to make a commitment to institute such a change in policies. Nonetheless this general environmental issue is not directly related to the proposed Project activities.

f. Storm drainage collection and disposal methods are simple and economical. The GOT will continue its ongoing program of regular cleaning of the combined systems in order to prevent flooding of houses situated in low lying areas.

VI. CONDITIONS PRECEDENT AND COVENANTS: In addition to the standard Conditions Precedent and Covenants contained in the Agreement the following are special covenants which will be included:

A. The Cooperating Country agrees that, except as AID shall otherwise agree, in writing, ONAS shall from time to time take or cause to be taken all such measures as shall be required to produce, by its fiscal year 1989, funds from internal sources equivalent to at least 13% of the annual average of ONAS' capital expenditures incurred, or expected to be incurred, during that year and the next following fiscal year.

B. The Cooperating Country agrees that, except as AID shall otherwise agree, in writing, by 1989 ONAS shall not incur any debt unless a reasonable forecast of the revenues and expenditures of ONAS shows that the projected internal cash generation of ONAS for each fiscal year during the term of the debt to be incurred shall be at least 1.3 times the projected debt service requirement of ONAS in such year on all debt of ONAS including the debt to be incurred.

C. Coordination of Urban Services and Land Needs Assessment; The Cooperating Country will participate with AID (i) in a program to assist selected municipalities improve their capacity to develop investment plans for urban services in coordination with other government agencies to improve the management of urban growth and (ii) in the carrying out of a land needs assessment to assist the Government in developing land acquisition policies needed to respond to future growth in a number of urban households.

D. Coordination with other Financing Institutions; The Cooperating Country will facilitate to the maximum extent full exchange of information and coordination of activities among all international financing institutions involved in financing ONAS programs affected by the Program.

E. Program Inspection, Monitoring and Evaluation; The Cooperating Country will arrange for joint AID/ONAS or AID/AFH monitoring and evaluation site visits (or other appropriate program reviews) prior to approval of the Program Implementation Plans and prior to any request for disbursement under each subprogram, and at such other times as AID may reasonably request.

VII. EVALUATION PLAN: The Program Implementation Agreement (IA) between the GOT and AID will require the establishment of an Evaluation Program for the HG Project and the development of a Project Evaluation and Tracking System (PETS). The required Project Evaluations will focus on the following;

- a. An evaluation of progress toward attainment of the objectives of the Project,
- b. The identification and evaluation of problem areas or constraints which may inhibit such attainment,
- c. Assessment of how such information may be used to help overcome such problems, and
- d. An evaluation, to the degree feasible, of the overall development impact of the Project.

1. Formative Evaluation; As in all HG Projects, the Implementation Agreement will also require the development and continual updating of a Program Implementation Plan (PIP), prior to the RHUDO approval of each disbursement of funds under the Project. A separate PIP will be required for each sub-project (i.e. The Sites and Services Sub-project and The Urban Upgrading Sub-project.) Prior to each disbursement, the RHUDO and the appropriate implementing agency will review the updated PIPs and Progress Reports that have been submitted to RHUDO to determine how close the project has come to achieving the planned objectives for that particular time frame. If necessary the PIP can be revised/updated to more closely reflect the actual implementation progress that has been accomplished. In addition, if appropriate the targetted objectives for the next disbursement can be revised at this time.

As part of this process RHUDO additionally develops routine reviews and summaries of all on-going project activities, so as to give an indication of the status of each of the targetted outputs, the degree of completion that has been achieved, as well as a statement of any problems and/or constraints to achievement of objectives. If possible the revised PIP will also propose a method of resolution of these problems/constraints during the next disbursement period.

2. Evaluation of Financial Performance Indicators: In order to evaluate that ONAS policy towards financial self-sufficiency is progressing satisfactorily, ONAS will provide AID the same Quarterly Reports required by the IBRD. These reports deal with a variety of indicators of financial performance including average tariffs in TD per m<sup>3</sup>, self-financing ratio and debt service coverage.

Additionally, ONAS will on an annual basis submit to AID forecasts of projected earnings from tariffs and other revenue sources required for it to meet its cash-flow requirements. ONAS will also advise AID at this

time of any necessary adjustments that must be made in its revenue generation. Both of these reports will provide AID with an on-going review of ONAS financial situation and the progress it is making towards achieving its financial objectives.

3. Joint Project Evaluation: At least once during the life of the Project as well as at the time of completion of the Project, the RHUDO, the GOT and the implementing agencies will undertake a detailed Joint Project Evaluation. Such an evaluation will review the entire project to date and will focus specifically on the impact that the HG Program Loan has had on the target beneficiary population's living conditions in the upgrading subproject and on the innovative financing aspect of the shelter credit loans in the sites and service subproject. The evaluation will also focus on the quantitative and qualitative measurements of the implementing institutions' performance.

Specifically such evaluations will focus, by sub-project and appropriate implementing agency, on the following types of indicators of project success;

a) Achievement of agency goals;

- i) Number of new installations (i.e. upgrading connections to sewerage system).
- ii) Funds available from various sources (i.e. user tariffs, government grants, loans, sale of services lots, maintenance fees, etc.).
- iii) Increased number of customers.
- iv) The number of agency personnel per customer served.
- v) The value of outstanding uncollected bills.
- vi) Tariffs levels

b) Maintenance Performance Indicators;

- i) Facilities in operation continuously.
- ii) Funds expended on replacement parts.

c) Financial Performance Indicators;

- i) Total annual budget.
- ii) Debt equity ratio.
- iii) Actual expenditures.
- iv) Total revenues collected.
- v) Self-financing ration.
- vi) Total billing uncollected.
- v) Unit cost of production.
- vi) Unit cost of systems installed.

d) Service performance indicators;

- i) Days of maintenance service provided.

e) Manpower and training performance indicators;

- i) Total staff assigned to various projects.
- ii) Annual training targets met.
- iii) Training information systems developed.
- iv) Workshops conducted.

NOTE: The above indicators are illustrative only and will be modified as appropriate during the development of the Joint Evaluation Plan and the detailed scopes of work for any technical assistance which will be required for the completion of the Evaluations.

4. Cost of Evaluations: RHUDO/NE will field consultants to take assist routine project reviews which are part of the periodic "Formative" type of evaluations mentioned above. Joint Evaluations will, however, require both additional technical assistance and additional funds to insure that all aspects of the planned evaluations will be covered. The Scopes of Work for the required technical assistance services as well as the Team's schedule and the necessary meeting schedule will be developed in cooperation with the GOT and the various implementing agencies. RHUDO/NE will budget for this cost subject to the availability of funding from the Housing and Urban Program Support Grant and if necessary, will seek assistance from NE/Tech to complete such evaluations.

ANNEX A: GOT REQUEST

ANNEX B: PROJECT AUTHORIZATION -  
ACTION MEMO TO AA/NE

- a) GUARANTY AUTHORIZATION - \$25 million (This Project Paper)
- b) GUARANTY AUTHORIZATION - \$15 million, September 28, 1979
- c) GUARANTY AUTHORIZATION - \$10 million, October 1, 1979

10/6

DRAFTGUARANTY AUTHORIZATIONPROJECT 664-HG-004

Provided From: Housing Guaranty Authority

For: The Government of Tunisia

Pursuant to the authority vested in the Assistant Administrator, Bureau for the Near East, Agency for International Development, by the Foreign Assistance Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance of guaranties pursuant to Section 222 of the FAA of not to exceed twenty-five million dollars (\$25,000,000) in face amount assuring against losses (of not to exceed one hundred percent (100%) of loan investment and interest) with respect to loans including any refinancing thereof by eligible U.S. investors (Investor) acceptable to A.I.D. made to finance housing projects in Tunisia. The authorization, when combined with the authorizations dated September 28, 1979 and October 1, 1979, bring the total amount of guaranties to be issued under this Project to fifty million dollars (\$50,000,000), (the "Guaranty"). The Guaranty will assist in financing the housing program of the Government of Tunisia for low income households in the smaller populations centers of Tunisia and the Greater Tunis area. Shelter activities to be financed hereunder specifically include sanitation improvements necessary to upgrade low income neighborhoods as well as core housing projects, sites and services projects, construction and home improvement loans, and neighborhood upgrading projects.

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

1. Term of Guaranty: The loans may extend for a period of up to thirty years (30) from the date of disbursement and may include such terms and conditions as shall be acceptable to A.I.D.. The guaranty of the loans shall extend for a period beginning with the first disbursement of the loans and shall continue until such time as the Investor has been paid in full pursuant to the terms of the loans.
2. Interest Rate: The rate of interest payable to the Investor pursuant to the loans shall not exceed the allowable rate of interest prescribed pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans made in the long term U.S. capital markets.
3. Government of Tunisia Guaranty: The Government of Tunisia shall provide for a full faith and credit guaranty to indemnify A.I.D. against all losses arising by virtue of A.I.D.'s guaranty to the Investor of from non-payment of the guaranty fee.

4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum of the outstanding guaranteed amount of the loans plus a fixed amount equal to one percent(1%) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.
5. Other Terms and Conditions: The guaranty shall be subject to such other terms and conditions as A.I.D. may deem necessary.

---

W. Antoinette Ford

---

Date

Clearances:

DAA/NE: BLangmaid	_____	Date	_____
GC/NE: GDavidson	_____	Date	_____
NE/NENA: TReese	_____	Date	_____
NE/DP: CJohnson	_____	Date	_____
NE/PD: RBell	_____	Date	_____
PRE/H: JHowley	_____	Date	_____
PRE/H: DOlinger	_____	Date	_____
GC/H: MKitay	_____	Date	_____
FM/LD: H. Shropshire	_____	Date	_____

68

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

ANNEX B -(b)

(September 28, 1979)  
GUARANTY AUTHORIZATION

PROJECT 664-HG-004

**Provided From:** Housing Guaranty Authority

**For** : The Government of Tunisia

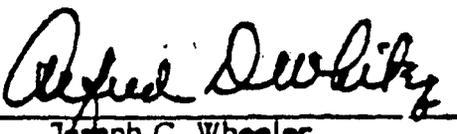
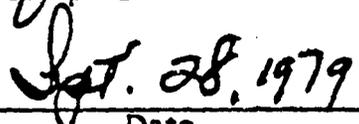
Pursuant to the authority vested in the Assistant Administrator, Agency for International Development, by the Foreign Assistance Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance of guaranties pursuant to Section 222 of the FAA of not to exceed fifteen million dollars (\$15,000,000) in face amount, assuring against losses (of not to exceed one hundred percent (100%) of loan investment and interest) with respect to loans by eligible U.S. investors (Investor) acceptable to A.I.D. made to finance housing projects in Tunisia. This guaranty will assist in financing the housing program of the Government of Tunisia for low income households primarily in the smaller population centers in the interior of Tunisia. Shelter activities including core housing projects, sites and services projects, construction and home improvement loans, and neighborhood upgrading projects shall be financed hereunder.

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

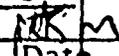
1. Term of Guaranty: The loans shall extend for a period of up to thirty years (30) from the date of disbursement and may include a grace period of up to ten years on repayment of principal. The guaranty of the loans shall extend for a period beginning with the first disbursement of the loans and shall continue until such time as the Investor has been paid in full pursuant to the terms of the loans.
2. Interest Rate: The rate of interest payable to the Investor pursuant to the loans shall not exceed the allowable rate of interest prescribed pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans made in the long term U.S. capital markets.
3. Government of Tunisia Guaranty: The Government of Tunisia shall provide for a full faith and credit guaranty to indemnify A.I.D. against all losses arising by virtue of A.I.D.'s guaranty to the Investor or from non-payment of the guaranty fee.

69

4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum of the outstanding guaranteed amount of the loans plus a fixed amount equal to one percent (1%) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.
5. The Project Delivery Plan: The Government of Tunisia and A.I.D. shall sign an Implementation Agreement which requires A.I.D. approval of a Project Delivery Plan prior to the first disbursement. The Project Delivery Plan shall show projected construction activity or other uses of the Loan over the duration of the implementation period. This plan shall be prepared by the Government of Tunisia with the assistance of A.I.D., and shall reflect the anticipated time, cost, and financing of the Project or subproject in accordance with the guidelines provided by A.I.D.
6. Other Terms and Conditions: The guaranty shall be subject to such other terms and conditions as A.I.D. may deem necessary.

  
 \_\_\_\_\_  
 Joseph C. Wheeler  
  
 \_\_\_\_\_  
 Date

Clearances:

DAA/NE:AWHITE  Date 9-28  
 GC/NE:JMullen  Date 9/28/79  
 NE/NENA:MHuntington  Date 9/24/79  
 NE/DP:BLangmaid  Date 9/29/79  
 NE/PD:SATaubenblatt  Date 9/28/79  
 DS/H:DMcVoy  Date 9/21/79  
 DS/H:WNGoodson  Date \_\_\_\_\_  
 GC/H:MGKitay  Date \_\_\_\_\_  
 FM/LD:ASmith  Date 9/21/79  
 GC/H:MGKITAY/LDENNISON:prj:09/18/79  

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

ANNEX B -(c)

(October 1, 1979)  
GUARANTY AUTHORIZATION

PROJECT 664-HG-004

Provided From: Housing Guaranty Authority

For : The Government of Tunisia

Pursuant to the authority vested in the Assistant Administrator, Agency for International Development, by the Foreign Assistance Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance of guaranties pursuant to Section 222 of the FAA of not to exceed ten million dollars (\$10,000,000) in face amount, assuring against losses (of not to exceed one hundred percent (100%) of loan investment and interest) with respect to loans by eligible U.S. investors (Investor) acceptable to A.I.D. made to finance housing projects in Tunisia. This guaranty will assist in financing the housing program of the Government of Tunisia for low income households primarily in the smaller population centers in the interior of Tunisia. Shelter activities including core housing projects, sites and services projects, construction and home improvement loans, and neighborhood upgrading projects shall be financed hereunder.

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

1. Term of Guaranty: The loans shall extend for a period of up to thirty years (30) from the date of disbursement and may include a grace period of up to ten years on repayment of principal. The guaranty of the loans shall extend for a period beginning with the first disbursement of the loans and shall continue until such time as the Investor has been paid in full pursuant to the terms of the loans.
2. Interest Rate: The rate of interest payable to the Investor pursuant to the loans shall not exceed the allowable rate of interest prescribed pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans made in the long term U.S. capital markets.
3. Government of Tunisia Guaranty: The Government of Tunisia shall provide for a full faith and credit guaranty to indemnify A.I.D. against all losses arising by virtue of A.I.D.'s guaranty to the Investor or from non-payment of the guaranty fee.

11

- 4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum of the outstanding guarantied amount of the loans plus a fixed amount equal to one percent (1%) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.
- 5. The Project Delivery Plan: The Government of Tunisia and A.I.D. shall sign an Implementation Agreement which requires A.I.D. approval of a Project Delivery Plan prior to the first disbursement. The Project Delivery Plan shall show projected construction activity or other uses of the Loan over the duration of the implementation period. This plan shall be prepared by the Government of Tunisia with the assistance of A.I.D., and shall reflect the anticipated time, costs, and financing of the Project or subproject in accordance with the guidelines provided by A.I.D.
- 6. Other Terms and Conditions: The guaranty shall be subject to such other terms and conditions as A.I.D. may deem necessary.

*Joseph C. Wheeler*  
 \_\_\_\_\_  
 Joseph C. Wheeler

October 1, 1979  
 \_\_\_\_\_  
 Date

Clearances:

DAA/NE:AWwhite \_\_\_\_\_ Date \_\_\_\_\_  
 GC/NE:JMullen *JM* Date 9/28/79  
 NE/NENA:MHuntington *MH* Date 9/21/79  
 NE/DP:BLangmaid \_\_\_\_\_ Date \_\_\_\_\_  
 NE/PD:SATaubenblatt *SA* Date 9/28/79  
 DS/H:DMcVoy *DM* Date 9/21/79  
 DS/H:WNGoodson *WJ* Date \_\_\_\_\_  
 GC/H:MGKitay *MG* Date \_\_\_\_\_  
 FM/LD:ASmith *AS* Date 9/21/79  
 GC/H:MGKITAY/LDENNISON:prj:09/18/79

ANNEX C: STATUTORY CHECKLIST FOR  
(THE HOUSING GURANTY PROGRAM)

**THE HOUSING GUARANTY PROGRAM**

**STATUTORY CHECKLIST**

**NAME OF COUNTRY**

**PROJECT NO. 664-HG-004**

**ANSWER YES OR NO PUT  
PP PAGE REFERENCES  
AND/OR EXPLANATIONS  
WHERE APPROPRIATE**

**A. General Criteria Under HG Statutory Authority.**

**Section 221(a)**

**Will the proposed project further one or more of the following policy goals?**

- (1) is intended to increase the availability of domestic financing by demonstrating to local entrepreneurs and institutions that providing low-cost housing is financially viable;**
- (2) is intended to assist in marshalling resources for low-cost housing;**
- (3) supports a pilot project for low-cost shelter, or is intended to have a maximum demonstration impact on local institutions and national; and/or;**
- (4) is intended to have a long run goal to develop domestic construction capabilities and stimulate local credit institutions to make available domestic capital and other management and technological resources required for low-cost shelter programs and policies?**

Yes - Domestic financing with the Sites and Services Project.  
See technical analysis.

---

Yes - Resources in the areas of upgrading and infrastructure

Yes - Sites and Services Project  
Institutions: ONAS  
AFH

---

Yes - Use of local contractors in both the Sites and Services and Upgrading components

---

**Section 222(a)**

**Will the issuance of this guaranty cause the total face amount of guaranties issued and outstanding at this time to be in excess of \$1,555,000,000?**

No

---

**Will the guaranty be issued prior to September 30, 1984?**

Yes

---

**Section 222(b)**

**Will the proposed guaranty result in activities which emphasize:**

- (1) projects providing improved home sites to poor families on which to build shelter and related services; or**

Yes - Serviced Sites and Upgrading

---

- (2) projects comprised of expandable core shelter units on serviced sites; or
- (3) slum upgrading projects designed to conserve and improve existing shelter; or
- (4) shelter projects for low-income people designed for demonstration or institution building; or
- (5) community facilities and services in support of projects authorized under this section to improve the shelter occupied by the poor?

No - Families have this option after purchase of serviced site

Yes

Yes - Institutions: ONAS-AFH

Yes - Water - Sanitation Sewerage Service and Maintenance

Section 222(c)

If the project requires the use or conservation of energy, was consideration given to the use of solar energy technologies, where economically or technically feasible?

N/A

Section 223(a)

Will the A.L.D. guaranty fee be in an amount authorized by A.L.D. in accordance with its delegated powers?

Yes

Section 223(f)

Is the maximum rate of interest allowable to the eligible U.S. investor as prescribed by the Administrator not more than one percent (1%) above the current rate of interest applicable to housing mortgages insured by the Department of Housing and Urban Development?

Yes

Section 223(h)

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

Yes

Section 223(j)

- (1) Will the proposed Housing Guaranty be coordinated with and complementary to other development assistance in the host country?
- (2) Will the proposed Housing Guaranty demonstrate the feasibility of particular kinds of housing and other institutional arrangements?

Yes - IBRD  
KDF

Yes - Indirectly thru the Sites and Services Component

15

(3) Is the project designed and planned by A.L.D. so that at least 90 percent of the face value of the proposed guaranty will be for housing suitable for families below the median income, or below the median urban income for housing in urban areas, in the host country?

Yes - Upgrading and Sites and Services Component are targeted to low income families

---

(4) Will the issuance of this guaranty cause the face value of guaranties issued with respect to the host country to exceed \$25 million in any fiscal year?

No - \$25 million FY 84

---

(5) Will the issuance of this guaranty cause the average face value of all housing guaranties issued in this fiscal year to exceed \$15 million?

Yes

---

Section 238(c)

Will the guaranty agreement provide that it will cover only lenders who are "eligible investors" within the meaning of this section of the statute at the time the guaranty is issued?

Yes

---

B. Criteria Under General Foreign Assistance Act Authority.

Section 620/620A

1. Does the host country meet the general criteria for country eligibility under the Foreign Assistance Act as set forth in the country eligibility checklist prepared at the beginning of each year?

Yes

---

2. Is there any reason to believe that circumstances have changed in the host country so that it would now be ineligible under the country statutory checklist?

No - Current USAID country statutory checklist

---

16

ANNEX D: N.E. BUREAU APPROVAL CABLES AND MEMOS

- A) NEAC PID APPROVAL CABLE
- B) MEMO ON PASSTHROUGH ISSUE
- C) NEAC CABLE ON PASSTHROUGH ISSUE

UNCLASSIFIED  
Department of State

OUTGOING  
TELEGRAM

PAGE 01 STATE 074109 7650 048784 A104970  
ORIGIN A10-00

STATE 074109 7650 048784 A104970

ORIGIN OFFICE NEPD-04  
INFO AANE-01 NEOP-03 HETC-04 HENA-03 PPCE-01 POPR-01 PPPB-02  
GC-01 SCFL-01 SCHE-01 FM-02 HO-05 FHLB-01 HUD-02 RELD-01  
MAST-01 /024 AS 314

INFO OCT-00 HENA-07 /042 R

DRAFTED BY A10/NE/PO/HENA: C. SHORTER: AMF  
APPROVED BY A10/DA/NE: B. LANGHAID  
A10/NE/PO: RVENEZIA  
A10/NE/PO/ENV: SLINTNER (DRAFT)  
A10/NE/PO: R. H. BELL (DRAFT)  
A10/NE/PO/HENA: D. MCCALL (DRAFT)  
A10/NE/OP: C. JOHNSON (DRAFT)  
A10/PRE/H: D. OLINGER (DRAFT)  
A10/PRE/H: OSWERDLIN (DRAFT)  
RHUDD/TUNIS: D. LIEBSON (DRAFT)  
A10/NE/TECH: BTURKER (DRAFT)  
A10/PPC/POPR: E. HUGHES-LEONARD (DRAFT)  
A10/GC/H: BVERET (DRAFT)  
A10/NE/HENA: J. ROBERTS (DRAFT)

-----072316 140040Z /38

O 132113Z MAR 84  
FM SECSTATE WASHDC  
TO AMEMBASSY TUNIS IMMEDIATE

UNCLAS STATE 074109

AIDAC

E.O. 12356: N/A

TAGS:

SUBJECT: NEAC PID REVIEW - PROPOSED AMENDMENT NO. A2 TO  
554-HG-004

1. THE NEAC MET MARCH 5, 1984 TO REVIEW USAID/TUNIS AND  
RHUDD SUBMISSION OF SUBJECT PID. DAVE LIEBSON, OFFICE  
OF HOUSING, ASSISTANT DIRECTOR FOR THE NEAR EAST (RHUDD,  
TUNIS) WAS PRESENT.

2. THE NEAC APPROVED THE PID AND THE PREPARATION OF THE  
PP AMENDMENT SUBJECT TO RECOMMENDATIONS, RESOLUTION OF  
ISSUES AND INCORPORATION OF CONCERNS AS FOLLOWS.

3. USE OF HG FUNDS FOR SANITATION UPGRADING: PROPOSED  
USE OF HG FUNDS FOR THIS PURPOSE IS WITHIN HG AUTHORITY  
FOR FINANCING SLUM UPGRADING DESIGNED TO IMPROVE EXISTING  
SHELTER, PROVIDED THAT: -- (A) TARGET NEIGHBORHOODS  
AND COMMUNITIES ARE CHARACTERIZED BY SLUM CONDITIONS;  
-- (B) HG FINANCED COSTS ARE FOR FACILITIES PREDOMINATELY  
WITHIN SUCH NEIGHBORHOODS AND COMMUNITIES. OFFSITE  
FACILITIES IN SUPPORT OF SUCH UPGRADING MAY BE FINANCED  
TO THE EXTENT REASONABLY ALLOCABLE TO SUCH AREAS; -- (C)  
HG FUNDING IS PROPORTIONATE TO THE NUMBER OF HG-ELIGIBLE  
BENEFICIARIES

DIRECTLY SERVED BY THE FACILITIES, AND -- (D) THE PROJECT  
DESIGN INCORPORATES MEANS TO ASSURE COMPLETION OF FACILITIES  
BENEFITTING ELIGIBLE COMMUNITIES AND BENEFICIARIES.

GC/H WILL ASSIST PP TEAM IN ADDRESSING THESE CRITERIA.

4. GOT UTILIZATION OF HG FUNDS:

THE NEAC ACCEPTS THE GOT ASSURANCES THAT UP TO DOLS 50  
MILLION (INCLUDING 4 MILLION PREVIOUSLY APPROVED FOR  
FLOOD RECONSTRUCTION) WILL BE UTILIZED OVER THE NEXT FOUR  
YEARS FOR THE PROPOSED RE-DIRECTED PROJECT PURPOSES.

5. FINANCIAL PLAN: (A) THE NEAC DISCUSSED THE USE OF HG  
FUNDS IN A CO-FINANCING ARRANGEMENT WITH THE IBRD AND  
KUWAIT DEVELOPMENT FUND AND REVIEWED THE PROPOSED PASS  
THROUGH ARRANGEMENTS FROM THE GOT TO UNAC. WHILE THE  
NEAC QUESTIONED GENERALLY THE APPROPRIATENESS OF GOT BOR-  
ROWING TO MEET BUDGETARY COUNTERPART COMMITMENTS, NO  
OBJECTION WAS EXPRESSED TO THE USE OF THE HG FUNDS FOR  
LOCAL CURRENCY NEEDS PER SE. THE NEAC ALSO CONCLUDED,  
HOWEVER, THAT THE GOT SHOULD PROVIDE ADDITIONAL RESOURCES  
AS ITS CONTRIBUTION TO THE PROGRAM, OVER AND ABOVE THAT  
NOW CONTEMPLATED. THIS MAY INCLUDE SOME APPROPRIATE MIX  
OF GOT, OTHER AGENCY (INCLUDING ONAS) AND BENEFICIARY  
FINANCING. THE PP SHOULD IDENTIFY AND DISCUSS THE VAR-  
IOUS SOURCES AND USE OF ALL PROGRAM FUNDS INCLUDING A  
BREAKOUT OF DOLLAR VS LOCAL COSTS, TO ASSURE NO DOUBLE  
COUNTING

(B) THE NEAC EXPRESSED CONSIDERABLE INTEREST IN THE USE  
OF HG FUNDS FOR URBAN IMPROVEMENT IN OTHER COUNTRIES OF  
THE REGION. THUS, THE PROPOSED PASS-THROUGH OF HG FUNDS  
FROM THE GOT TO ONAS ON A GRANT BASIS WAS QUESTIONED IN  
REGARD TO ITS IMPACT ON REPLACABILITY AND AID POLICY IN  
GENERAL. THE NEAC NOTED THE LOAN TERMS BETWEEN ONAS AND  
THE OTHER DONORS, AND EXPRESSED A PREFERENCE THAT THE HG  
FUNDS SHOULD NOT BE DIFFERENTIATED, I.E. THAT THE HG BE  
LOANED TO ONAS, EITHER BY THE GOT OR DIRECTLY, RATHER  
THEN GRANTED. THE MISSION SHOULD EXAMINE THE ISSUE WITH  
THE GOT FROM THIS PERSPECTIVE AND SEEK A10/W ADVISE PRIOR  
TO SUBMISSION OF THE PP AMENDMENT.

6. TECHNICAL ASSISTANCE:

THE NEAC APPROVES DOLS 100,000 TA COMPONENT AS PROPOSED,  
HOWEVER, FUNDING IS NOT AVAILABLE FROM P D AND S.  
RHUDD/TUNIS OFFERED TO PROVIDE INITIAL REQUIRED FUNDS FOR

TA. NEAC PROPOSED THAT USAID/TUNIS WOULD PROVIDE THE  
REMAINING FUNDS FROM FY 85 ESF FUNDS. REIMBURSEMENT OF  
RHUDD/TUNIS FY 1984 FUNDS, HOWEVER, CANNOT BE REIMBURSED  
FROM FY 1985 ESF FUNDS.

7. IN ADDITION TO THE ABOVE, THE NEAC AGREED THAT THE  
FOLLOWING AREAS SHOULD BE ADDRESSED IN THE PP:

A. ENVIRONMENTAL CONCERNS: THE PID DOES NOT DISCUSS  
CURRENT AID ENVIRONMENTAL CONCERNS. THE PP AMENDMENT  
SHOULD CONTAIN A DETAILED ENVIRONMENTAL ANALYSIS AS DIS-  
CUSSED WITH LIEBSON AND TEAM. THESE CONCERNS ARE OUT-  
LINED IN MEMO FROM SLINTNER TO SHORTER/OLINGER OF 02  
MARCH. LIEBSON HAS COPY.

B. EVALUATION PLAN: THE NEAC WAS CONCERNED THAT THE PID  
MADE NO MENTION OF HOW THE PROJECT WOULD BE EVALUATED AND  
THAT THE PP AMENDMENT ADDRESS THIS IN THE PP INCLUDING  
FINANCING REQUIRED AND WHO WILL CARRY OUT EVALUATION OVER  
PROJECT LIFE. SHULTZ

UNCLASSIFIED

78

MEMORANDUM

TO: DAA/NE, Bradshaw Langmaid  
FROM: NE/PD, Ronald Venezia *RV*  
SUBJECT: Tunisia - Issues Paper for the Housing Guarantee (HG)  
Project 664-004: Report on "Pass-Through" Issue

REFS: (A) State 074109  
(B) Report on "Pass-Through" Issue  
(C) Economic Analysis  
(D) Financial Analysis  
(E) PPC/PDPR, Memorandum  
(F) NE/PD/PL, Memorandum

PROBLEM: During the NEAC review of the PID for the proposed HG PP amendment, an issue was raised concerning the proposed grant "Pass-Through" of the HG funds by the GOT to ONAS, the Implementing agency. USAID/Tunis and RHUDO/NE were requested to re-examine the concept of a grant "Pass-Through" in light of the Bureau's preference for a loan "Pass-Through" of the HG funds and to seek AID/W advice concerning the resolution of this issue prior to submission of the PP Amendment.

DISCUSSION: A PRC meeting was held on June 28, 1984, to review and discuss the attached Report and Analysis. The Report concluded that, at this time, a loan "Pass-Through" to ONAS is an unrealistic and unacceptable funding mechanism for implementation of the subject program. Therefore, USAID/Tunis and RHUDO/NE recommended that NEAC approve a grant "Pass-Through" and the inclusion of this concept as the funding mechanism for the proposed PP amendment.

Although a majority of the committee members concurred in the overall conclusions and recommendations of the Report, NE/DP/PL and PPC/PDPR felt that the Report and the accompanying analysis does not adequately justify the approval of a grant "Pass-Through" of the HG funds. Therefore, the PRC is unable to provide the NEAC with a final recommendation concerning the "Pass-Through" issue.

The basis of the PPC dissent is that Agency policy clearly requires that the organization which ultimately utilizes such funds should in fact pay the true cost of these funds. In addition, such costs

11

should be reflected in the tariff rates that are established by the organization. NE/PD/PL feels that a loan "Pass-Through" is preferable because it promotes sound financial management practices and also that the Financial Analysis attached to the Report did not in fact clearly establish that the best case scenario for the provision of a loan to CNAS (i.e., interest rate of 3.5% and 10 years grace on the payment of Principal) was an unacceptable alternative from a financial point of view. The representatives of these offices have agreed to provide NEAC with separate memoranda elaborating the concerns of their respective offices. (To be distributed at the NEAC meeting as References (E) and (F))

June 29, 1984

SUMMARY Report on the "PASS-THROUGH" issue related to the Proposed Amendment to the Tunisia Housing Guarantee Project 664-004:

PROBLEM: During the NEAC review of the PID for the proposed Amendment to Project 664-004, a question was raised concerning the "Pass-Through" of the HG funds as a grant to the implementing agency, the National Sewerage Authority (ONAS). The NEAC expressed a preference that the GOT pass the HG funds to ONAS as a loan rather than as a grant as proposed in the PID. Prior to submitting a final PP Amendment to the NEAC, USAID/Tunis and RHUDO/NE were requested to re-examine the "Pass-Through" issue, discuss it with the GOT, and then seek AID/W advice concerning any resulting decisions.

DISCUSSION: As a result of the NEAC request, a detailed analysis of the "Pass-Through" issue was completed [See Attachments]. This analysis included an examination of the economic validity of the GOT's planned investment program in the Sanitation Sector as well as a study of the financial viability of ONAS and the impact of a variety of alternative scenarios for the provision of the HG funds to ONAS including the affect of a loan or a grant on the covenants of the existing ONAS loan agreement with the IBRD.

The Economic Analysis of the GOT's VI Development Plan [See Attachment A] concluded that the projected level of investment in the Sanitation Sector is economically essential if past investments in the productive capacity of the nation (i.e., agriculture, tourism, etc.) are to be maintained and serious deterioration of the nation's health and environmental infrastructure is to be prevented.

The Financial Analysis [See Attachment B] of ONAS indicated that during its brief eight year history the organization has made extraordinary progress in establishing a sound financial basis for investments and operations, while undertaking an essential public service oriented program in the Sanitation Sector. It was found that ONAS is well-managed in every sense and is well on the way to achieving a variety of objectives related to financial self-sufficiency within the decade.

ONAS and the GOT also argue that ONAS's record of improving its financial and operational standards compare favorably with (and in some cases exceed) similar U.S. public wastewater utilities. This has been accomplished, they add, under political and financial constraints which are far more difficult than the ones which face their U.S. counterparts. For example, such U.S. authorities are generally permitted to operate with an overall annual operational deficit of approximately 11% of expenses, while normally obtaining required funding for expansion from local, state, and federal

resources (i.e., tax exempt bonds, indirect government subsidies, and federal government grants).

At present, ONAS's operational revenues are derived from a very limited variety of sources including tariffs, service and installation charges, loans and compensatory governmental payments. In addition, the covenants of an existing IBRD loan agreement require ONAS to maintain a debt/equity ratio of 1.3 and to internally generate 13% of average annual capital expenditures by 1986. A failure to comply with these covenants is unacceptable to the GOT due to the fact that such a failure would mean a departure from existing policy objectives and require a restructuring of existing loan agreements with the IBRD and other donors. The analysis demonstrates that acceptance of any additional debt by ONAS, even a loan with a long grace period on repayments, would have the net result of deteriorating ONAS's ability to internally generate required capital while seriously jeopardizing the organization's debt/equity position and thus inhibiting ONAS's ability to continue to borrow funds needed for projected investment in essential future expansion of the sanitation system.

As part of the requested analysis, the overall GOT/ONAS program was thoroughly re-examined in order to determine whether the proposed grant "Pass-Through" would result in adoption of policies and/or the financing of projects which might otherwise be viewed as economically unsound. This re-examination concluded that the exact opposite was true. A grant "Pass-Through" would allow ONAS to continue the existing commitment to sound and economically realistic policies and programs. On the other hand, a loan "Pass-Through" with the acceptance of another debt by ONAS would in fact force the organization to adopt some combination of economically unsound and negative actions in the future. Such unacceptable actions include:

1. Increasing revenues through additional tariffs: Past ONAS tariffs and those scheduled under the IBRD agreement increasingly reflect the average incremental cost of providing services. To push for more rapid increases than are already scheduled is not considered to be a feasible option given social, political, and economic realities in Tunisia.
2. Reducing planned investments in the Sector: The costs to the economy of this option include the eventual pollution of existing scarce water resources, as well as the loss of revenues from a decrease in tourism and from the probable reduction in other productive industries resulting from the inevitable lowering of

CV

national health and environmental standards. Politically, the current levels of planned investment in the Sanitation Sector must be maintained if the existing gap between the provision of water and sanitation services in urban and rural areas is to be addressed. This option is not economically or political acceptable to the GOT.

3. Reducing the level of ONAS's expenditures for operation and maintainance of the System: This option is seen as a short-term solution which would have a devastating long-term affect on the existing sanitation infrastructure and on the high operational standards that ONAS has successfully adopted.

OTHER DONORS: Due to the fact that the proposed HG funds will be the U.S. contribution to a co-financed sectoral program, extensive discussions were held with representatives of the IBRD. In principle, the IBRD noted that it shares AID's preference that the costs of any borrowing should be passed on to the organization that utilizes the borrowed funds. However, the Bank advised RHUDO/NE that in this particular case it believes that the proposed loan/budgetary mix of GOT financing for the sectoral program is reasonable and that the proposed borrowing of HG funds for a grant "Pass-Through" to ONAS, as a budgetary contribution, is acceptable to the IBRD. In addition, both the IBRD and the Kuwait Development Fund expressed a reluctance to accept a proposal to accomodate AID's preference for a sharing of the grant/loan financing for the program by restructuring their respective agreements with the GOT. This reluctance is based on the preception that the proposed loan "Pass-Through" would have no substantive policy impact on the GOT's sectoral programs.

GOT DISCUSSIONS: Subsequent to the completion of this detailed analysis, a variety of alternative senarios and AID's preference for a loan "Pass-Through" to ONAS were thoroughly discussed with appropriate GOT and ONAS officials. The GOT was urged to accept the concept of a loan "Pass-Through" in order to assure that a true picture of program costs is reflected in ONAS's financial statements and in the GOT's plans in the Sanitation Sector. The GOT officials noted that such an arrangement had already been considered and rejected at the very highest levels of government. In any case, it was pointed out that the GOT would borrow the HG funds and pay the agreed on interest rate. These funds would then be passed-through to ONAS as the government's contribution to an essential program. Therefore, the GOT officials concluded that the true cost of the funds would in fact be reflected in the GOT's future planning.



After exploring the variety of available options, the GOT officials concluded that the proposed loan "Pass-Through" to ONAS would not be an acceptable option at this time.

CONCLUSION: Subsequent to the completion of the requested analysis and discussions with appropriate GOT and IBRD representatives, USAID/T and RHUDO/NE agreed on the following possible options:

1. To insist on a loan "Pass-Through" and a restructuring of existing agreements with the other donors. At this point, such insistence would require governmental intervention at an extremely high level and might not really have a substantial impact on the GOT policy decisions already reached.
2. To withhold AID participation in the proposed activities. This would force the GOT to cut back on investments in the sector and result in the exclusion of low-income neighborhoods and slums due to the fact that these are the most expensive areas to reach and produce the lowest revenue returns to investments. This option would also exclude AID from involvement in an essential and replicable package of activities.
3. To agree to the concept of a grant "Pass-Through" to ONAS and to the completion of the proposed Amendment to the PP.

It was concluded that the GOT's Sanitation Sector program is essential and economically viable and that a grant "Pass-Through" of the HG funds will enable the GOT to finance its share of the costs of implementing the program, while ensuring that the ONAS is not forced to incur an unreasonable additional debt which will delay the achievement of financially sound organizational and programmatic objectives already agreed to with the other donors.

RECOMMENDATION: That the PRC agree with USAID/Tunis and RHUDO/NE and recommend that NEAC approve of the provision of HG funds to ONAS as a grant rather than as a loan and that this concept be included as the funding mechanism for the Urban Upgrading component of the proposed Project Paper Amendment.

ATTACHMENTS:

- (A) State 074109
- (B) PP ANNEX; Economic Analysis
- (C) PP ANNEX; Financial Analysis

UNCLASSIFIED  
Department of State

OUTGOING  
TELEGRAM

PAGE 01 STATE 206773

6334 032027 AID1086

STATE 206773

6334 032027 AID1086

ORIGIN AID-00

ORIGIN OFFICE HEPD-04

INFO AAHE-01 HEDP-03 HETC-04 HENA-03 PDPR-01 GC-01 CCFI-01  
GCHE-01 HO-05 RELO-01 MAST-01 OO-01 /027 A2 1214

INFO OCT-08 EB-08 NEA-07 L-03 /018 R

DRAFTED BY AID/NE/PO/HENA: SFREUNDLICH:AMF

APPROVED BY AID/GAA/NE: B. LANGHAID

AID/NE/PO: RHHDELL

AID/NE/PO/HENA: BHMCCALL (PHONE)

AID/PPG/PDPR: E. HULLANDER

AID/NE/HENA/TM: J. ROBERTS (DRAFT)

AID/NE/DP: C. JOHNSON (DRAFT)

AID/PRE/H: D. OLINGER (DRAFT)

AID/NE/TECH: K. SHERPER (DRAFT)

AID/NE/PD: R. VENEZIA (DRAFT)

-----045140 1484062 /38

P 140121Z JUL 84

FM SECSTATE WASHDC

TO AMEMBASSY TUNIS PRIORITY

UNCLAS STATE 206773

AIDAC

E.O. 12356: N/A

TAGS:

SUBJECT: TUNISIA HOUSING GUARANTEE PROJECT 664-004,  
AMENDMENT 2: HEAC REVIEW OF PASS-THROUGH ISSUE

REFS: A) STATE 074103; B) REPORT ON PASS-THROUGH ISSUE  
06/21/84

1. SUMMARY: HEAC AGREED TO A GRANT PASS-THROUGH TO ONAS WITH SOME RESERVATIONS EXPRESSED REGARDING THE POTENTIAL NEGATIVE IMPACT ON FINANCIAL MANAGEMENT PRACTICES. A MAJOR POINT OF THE DISCUSSION WAS THAT ONAS'S PROJECTED SCHEDULE OF TARIFF RATE INCREASES, AIMED AT REACHING THE REVENUE TARGETS ESTABLISHED UNDER THE IBRD LOAN, REPRESENTS A POLICY OBJECTIVE WHICH AID SHOULD SUPPORT FULLY. HEAC ALSO FELT THAT RATES OF INCREASE BEYOND THOSE PRESENTLY PROJECTED WERE JUDGED TO BE UNREALISTIC. THE HEAC NOTED THAT THE AID PROJECT AGREEMENT SHOULD CONTAIN COVENANTS (AS INDICATED IN PARA 2 BELOW) RELATED TO THE FINANCIAL TARGETS THAT THE GOT AND ONAS HAVE SET FOR THE ORGANIZATION. IN ADDITION HEAC EXPRESSED THE NEED FOR A GOT INDICATION CONCERNING ITS CONTINUING COMMITMENT TO IMPLEMENT A SERIES OF GRADUAL YEARLY RATE INCREASES OF THE TARIFF CHARGED BY ONAS. A LETTER SUMMARIZING THE GOT'S INTENTIONS SHOULD BE PROVIDED PRIOR TO THE DISBURSEMENT OF ANY HG FUNDS. WITHIN THIS CONTEXT THE HEAC AGREED THAT THE MISSION AND RUDDO SHOULD IMMEDIATELY PROCEED WITH THE FINALIZATION OF PROPOSED PP AMENDMENT FOR PRESENTATION IN AID/W ASAP. END SUMMARY.

2. THE HEAC MET ON JULY 5, 1984 TO REVIEW THE REFERENCED REPORT ON THE PASS-THROUGH ISSUE RELATED TO PROJECT 664-004. THE DISCUSSION WAS GENERALLY FAVORABLE TO THE ARGUMENTS CONCERNING THE NECESSITY OF A GRANT PASS-THROUGH TO ONAS. HOWEVER IT WAS NOTED THAT ALTHOUGH ONAS'S PROJECTED SCHEDULE OF TARIFF RATE INCREASES IS REALISTIC AND ACCEPTABLE TO AID, THE GOT HAS NOT AS YET APPROVED ONAS'S LAST TWO APPLICATIONS FOR AUTHORITY TO INCREASE THE EXISTING TARIFF RATE. AS A RESULT IT WAS UNCLEAR TO HEAC AS TO WHETHER OR NOT ONAS WILL BE IN A POSITION TO MEET THE ESTABLISHED REVENUE AND INVESTMENT TARGET BY 1989. HEAC FELT THAT A CONTINUED FAILURE TO

IMPLEMENT THE PLANNED RATE OF TARIFF INCREASES WILL CLEARLY INHIBIT ONAS'S ABILITY TO ESTABLISH A SUCCESSFUL RECORD OF FINANCIAL MANAGEMENT BY 1989. THEREFORE THE HEAC AGREED THAT THE TARGETS ONAS AND THE GOT HAVE AGREED TO SHOULD BE INCLUDED IN THE PP AMENDMENT AS COVENANTS AND THAT THE GOT SHOULD PROVIDE AN INDICATION OF ITS COMMITMENT TO A SPECIFIC PLAN FOR ANNUAL INCREASES IN THE TARIFF RATE WHICH ONAS WILL BE ALLOWED TO CHARGE ITS CUSTOMERS.

HEAC REQUESTED THAT THE SUBJECT PP AMENDMENT, IN ADDITION TO OTHER APPROPRIATE CPS AND/OR COVENANTS, INCLUDE THE FOLLOWING:

-- (A) A COVENANT SETTING FORTH ONAS'S AGREEMENT TO PROVIDE, FROM INTERNALLY GENERATED REVENUES IN 1989, A MINIMUM OF 13 PERCENT OF THE ORGANIZATION'S PLANNED CAPITAL INVESTMENT PROGRAM, AND

-- (B) A COVENANT THAT ONAS, IN 1989, WILL MAINTAIN A MINIMUM DEBT/SERVICE RATIO OF 1.3.

3. IN ADDITION, IN ORDER TO PROVIDE A CLEAR INDICATION OF THE GOT'S INTENTION TO COMPLY WITH THE ABOVE TARGETS FOR ONAS, HEAC REQUESTED THAT THE MISSION OBTAIN, PRIOR TO DISBURSEMENT OF ANY HG FUNDS, A LETTER FROM THE GOT WHICH SETS FORTH A SPECIFIED PLANNED RATE OF ANNUAL TARIFF INCREASES FOR ONAS DURING THE LIFE OF THE PROPOSED PROJECT. THE LETTER SHOULD BREAK OUT THE RATE OF TARIFF INCREASE BY YEAR (I.E., BEGINNING WITH 1984 AND ENDING IN 1989). HEAC NOTED THAT SUBSEQUENT TO AUTHORIZATION OF THE PROJECT AMENDMENT AND PRIOR TO THE INITIATION OF DISBURSEMENTS UNDER THE PROJECT, ARRANGEMENTS SHOULD BE WORKED OUT FOR AN ANNUAL EVALUATION OF PROGRESS IN MEETING THE RATE INCREASE TARGETS. DRAWDOWNS OF HG FUNDS WILL BE BASED ON THE ACTUAL IMPLEMENTATION OF THE GOT'S PLAN FOR ANNUAL TARIFF INCREASES.

4. REVIEW OF THIS PROJECT HAS RAISED A POLICY ISSUE ON COST RECOVERY. PPC HAS AGREED TO NOT HOLD UP APPROVAL OF THIS PROJECT WHILE THE POLICY IS REVIEWED BUT NOTES THAT THIS PROJECT, PARTICULARLY THE ELEMENT OF THE GOT GRANTING THE FUNDS PASSED THROUGH THE ONAS, IS NOT TO BE CONSIDERED PRECEDENT SETTING. DAM

*Copy*

UNCLASSIFIED

85

ANNEX E: LOG FRAME

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Project Title & Number: Tunisia Low Cost Shelter Project No. 664-HG-004 B and C

Life of Project: FY 83 to FY 88  
Total U.S. Funding: \$46,000,000  
Date prepared: May 18, 1984

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes:(A-1)	Measures of Goal Achievement:(A-2)	Means of verification (A-3)	Assumptions for achieving goal targets: (A-4)
1. The project objectives are to encourage more rational development of urban land and Services, to encourage owner-built rather than government-built housing, and to improve living conditions in previously built-up low income neighborhoods.	1. Adoption of serviced sites and owner self-help housing construction credit as major element of GOT VIIth Development Plan (1987-1991) Programs for low-income groups. 2. Improvements in sanitary service indicators particularly in towns where ONAS has responsibility to reach 60% of urban population by 1990.	1. VIIth Development Plan 2. National Census 1985-1990	1. GOT continues to support overall shelter goals of program and give necessary priority to low-income urban populations 2. GOT provides necessary budget support and personnel to ONAS, CNEL and AFH.

8/1

Project Purpose: (B-1)	Conditions that will indicate purpose has been achieved: End-of-Project status (B-2)	Means of Verification (B-3)	Assumptions for achieving purpose: (B-4)
<p>1. To expand the availability of serviced housing sites which are affordable by that portion of the Tunisian population which is at or below the National Urban Median Income Level, and to help them build their own homes on those sites.</p> <p>2. To increase the availability of mortgage credit for the purchase of serviced housing sites and the construction of housing units by the target low-income beneficiary population.</p> <p>3. To upgrade and expand sanitary sewerage and drainage in selected low-income urban neighborhoods and secondary towns.</p>	<p>1. Production of sites and services reaches 25% of total AFH production in 8 interior towns.</p> <p>2. CNEL mortgage portfolio includes credit for land purchase and housing construction for at least 3,550 low-income households by 1989.</p> <p>3. At least 1000 hectares have been upgraded through sewerage and drainage improvement and 15,500 low-income housing units within these selected neighborhoods and secondary towns are connected to sanitary sewerage by 1989.</p> <p>2. At least 22,000 houses in Greater Tunis in an area covering 845 hectares have improved sewerage and drainage facilities.</p>	<p>1. AFH records of serviced sites developed.</p> <p>2. CNEL records of No. of low-income households downpayments and mortgage loans signed.</p> <p>3. ONAS records of work completed in target neighborhoods and towns.</p> <p>4. SONED records of sewerage services being paid for in selected low-income neighborhoods and towns.</p>	<p>1. GOT will borrow the required funds to complete program.</p> <p>2. Loans will go to target population and GOT will control and monitor enforcement of terms of loan.</p> <p>3. That semi-skilled and skilled labor and the land required to complete the Program are available at the target sites.</p> <p>4. There is a demand for housing loans of CNEL.</p> <p>5. AFH and CNEL will have sufficient staff to implement the program.</p> <p>6. GOT will borrow the funds sufficient to</p>

Project Purpose: (B-1)	Conditions that will indicate purpose has been achieved: End-of-Project status (B-2)	Means of Verification (B-3)	Assumptions for achievement purpose: (B-4)
4. To improve the capacity of GOT urban shelter land and services agencies and municipalities to plan for and prioritize investment in urban land development and services.	Urban land development assessment and municipal investment study completed	RHUDO records RHUDO records	conduct the upgrading work. 7. ONAS will have sufficient staff to implement program. 8. Sufficient H2O is available in the inter towns and Greater Tun enable the system to function. 9. IBRD & KDF finance portions of program a completed in a timely manner.

89

Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	Means of Verification (C-3)	Assumptions for achievement of outputs; (C-4)
1. Housing sites serviced for low-income population.	1. 3,550 low-income housing sites developed by 1989.	1. AFH, CNEL and MOH records.	1. Suitable land is acquired by AFH.
2. Housing Land construction loans provided to target low-income households.	2. 3,550 low-income land and construction mortgages contracted by 1989.	2. " " " "	2. Local contractors complete work in accordance with specifications and advertised prices.
3. New housing construction completed by low-income target population.	3. 3,550 units built by low-income beneficiaries.	3. " " " "	3. Sufficient demand exists among low-income target groups. 4. CNEL & AFH have adequate administrative capacity to initiate a service loan program targeted on low-income urban population.
4. Houses in low income slums connected to sanitary lines and potable water.	4. 16000 low-income households connected to sewer systems by 1989.	4. SONEDE records	5. contractors are available and complete within budget in a timely manner.
5. Primary & secondary sewer lines installed.	5. 224 Km primary & secondary sewer lines installed by 1989.	5. ONAS records	
6. Sewer lines recalibrated.	6. 8.3 Km sewer lines recalibrated by 1989.	6. ONAS records	6. Necessary commodity procurements are completed within budget and in a timely manner.
7. Treatment Plants.	7. treatment plants built	7. ONAS records	
8. Drainage lines constructed.			

90

Project Inputs (D-1)	Implementation Target (Type and Quantity) (D-2)	Means of Verification (D-3)	Assumptions for providing inputs: (D-4)
<u>A. HG Program Loan</u>	<u>A. US \$46 Mill. HG Loans</u>	<u>A. HG Program Loans</u>	<u>A. HG Program Loan</u>
1. Sites & Services Component.	1. \$14 Mill. for sites, services & housing construction loans.	1. Rhudo records.	1. HG Loan authorized Bureau.
2. Urban Upgrading Component.	2. \$24 Mill. for upgrading sewerage and selected drainage in secondary cities included in Thirty Cities Programs. 3. 8 Mill. of low-income upgrading of 4 neighborhoods included in Greater Tunis Program.	2. Rhudo records.	2. GOT signs loan agreement for first borrowing US lenders by end of Fiscal Year 1984.
<u>B. IBRD Loan</u>	<u>B. US \$34 Million</u>	<u>B. IBRD/GOT records</u>	<u>B. IBRD Conditions of effectiveness are met</u>
<u>C. KDF Loan</u>	<u>C. US \$14 Million</u>	<u>C. KDF/GOT records</u>	<u>C. KDF resources available.</u>
<u>D. GOT Contribution</u>	<u>D. US \$49 Million</u>	<u>D. GOT records</u>	<u>D. GOT resources available.</u>
<u>E. Beneficiary Downpayment</u>	<u>E. US \$1.4 Million</u>	<u>E. CNEL records</u>	<u>E. Beneficiaries sign up for loans.</u>

41