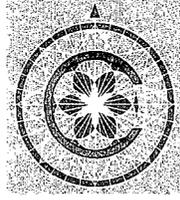


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CHEMONICS INTERNATIONAL INC.

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PROGRAM FOR THE PROMOTION OF PRIVATE PARTICIPATION  
IN ENVIRONMENTAL SERVICES (HG-V/PPES)

FOURTH ANNUAL REVIEW

Contract No. PCE-1008-1-00-6006-00  
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## TABLE OF CONTENTS

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EXECUTIVE SUMMARY		iii
SECTION I	INTRODUCTION	I-1
	A. Background	I-2
	B. Overview of the PPES Program	
	C. Definition of the Concept of Sustainability	I-3
SECTION II	PRIVATE SECTOR INVOLVEMENT IN SERVICE OPERATION	II-1
	A. Sewerage Services	II-1
	B. Solid Wastes	II-7
	C. Land Development	II-12
SECTION III	PRIVATE FINANCING	III-1
	A. Progress Made in Year 4 of the Program Period	III-1
	B. Efficiency of Technical Assistance Services	III-2
	C. Sustainability	III-2
	D. Recommendations	III-3
SECTION IV	INSTITUTIONAL CAPACITY BUILDING	IV-1
	A. Progress	IV-1
	B. Efficiency of Technical Assistance Services	IV-2
	C. Sustainability	IV-2
	D. Recommendations	IV-2
	E. Other Foreign Lenders	IV-2
SECTION V	COMMUNITY PARTICIPATION	V-1
	A. Progress Made in Year 4 of the Program Period	V-1
	B. Efficiency of Technical Assistance Services	V-2
	C. Sustainability	V-2
	D. Recommendations	V-2
SECTION VI	ALLOWABILITY OF PROGRAM SPENDING	VI-1
SECTION VII	CONCLUSIONS AND RECOMMENDATIONS	VII-1
	A. Overview	VII-1
	B. Attainment of PPES Objectives	VII-2

---

**TABLE OF CONTENTS**  
(continued)

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	C. Progress Made Over the Past Year and Sustainability of Corresponding Achievements	VII-3
	D. Implementation of Program Activities and Attainment of Monitoring Benchmarks	VII-4
	E. Contribution of Technical Assistance Services	VII-4
	F. PACT versus Tunisian Government Objectives	VII-4
	G. Progress Made on Pilot Projects	VII-5
	H. Priorities for the Use of Remaining Funding	VII-5
	I. Progress on the Environmental Impact Assessment	VII-6
ANNEX A	JOINT PLAN OF ACTION (PACT)	A-1
ANNEX B	LIST OF PERSONS INTERVIEWED	B-1
ANNEX C	LIST OF REPORTS CONSULTED	C-1
ANNEX D	AUDIT REPORT ON THE ALLOWABILITY OF PROGRAM SPENDING	D-1

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## EXECUTIVE SUMMARY

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This document contains a report on the fourth annual review of the PPES program. The purpose of the review process is to provide decisionmaking officials within the Tunisian government and at the Regional Housing and Urban Development Office (RHUDO) attached to the United States Agency for International Development (USAID) with an overview of the progress made by the program since its inception. It also assesses the value of allowable spending under the HG-V lending program. The focus is on activities carried out since the third annual review conducted in June of 1996.

The goal of the PPES program (Project No. 664-0356, HG-V) is to bolster economic growth and social stability by improving environmental quality and housing conditions in urban areas in general and in low-income neighborhoods in particular. The purpose of the PPES program, which provides 3.7 million dollars in technical assistance funding and is backed by a 40 million dollar Housing Guaranty Program loan for the five-year project period from 1993 to 1998, is to strengthen the coverage and efficiency of urban environmental services through stepped-up participation by the private sector.

The PPES program has four main objectives:

- To step up private sector involvement in the operation of environmental services;
- To boost participation by the private sector in the financing of urban environmental services;
- To clarify and strengthen the roles of government agencies in the management of contracts entered into with the private sector; and
- To promote community participation in activities designed to heighten public awareness of environmental issues.

The main background document for program review purposes is the Program Plan of Action (PACT) which contains a list of the activities to be conducted by different government agencies.

### **A. Objective 1: Step Up Private Sector Involvement in the Operation of Environmental Services**

This objective in regard to the operation of environmental services has three components, namely a sewerage service, a solid waste and a land development component. There has been progress in all three of these areas during the course of the past year.

#### **A1. Sewerage Services**

The main accomplishments in the sewerage sector during the course of the fourth year of the PACT were as follows:

- Signature by the National Sewerage Agency (the ONAS) of its first contract for the operation of a sewerage system by a private enterprise. SOMEDEN, a Tunisian firm created as the product of a Tunisian/French partnership, began operating the El Menzah sewerage system in February of 1997.
- The evaluation of this pilot project, covering an area with a population of 40,000 inhabitants serviced by a 150 kilometer-long sewerage system or thereabouts, deemed its performance during the first few months of operation by the private enterprise to be satisfactory and found system cleaning operations to be acceptable and in keeping with the requirements spelled out by the National Sewerage Agency.
- The first contract for the operation of three sewage treatment plants is scheduled to be signed in July of 1997 as part of a pilot project which was competed internationally, with the outcome of the competitive bidding process pending approval by the High Commission for Government Contracting (the CSM).
- The Ninth Plan provides for the contracting out of six sewerage systems and six treatment plants to be operated by private service providers.
- The Tunisian government is looking to finance the Tunis-West treatment plant under a concession or "BOT" (build, operate, transfer) arrangement.
- Training in contracting procedures and contract management techniques was conducted in February of 1997.

The following recommendations take into account the extent of the progress already made in this area and the allotted time frame for the completion of corresponding activities:

- Limit the lead time for the award and signature of corresponding contracts to a period of from eight to ten months;
- Explore the possibility of forming packages of sewerage systems and treatment plants for upcoming contracting operations with private service providers.
- Expand the size of corresponding contracts to make them more attractive to prospective service operators.
- Increase the number of contracts for the operation of sewerage systems and sewage treatment plants by private service providers to the equivalent of 1000 kilometers of sewerage lines and treatment plants serving an equivalent population of 500,000 inhabitants by the end of the implementation period for the Ninth Plan.
- Form packages combining systems in both large and small cities to allow the private sector to play an innovative role in smaller-size cities and help promote the growth of small and medium-scale enterprises within this sector.
- Announce the time and place for the public opening of bids for contracts for the operation of sewerage systems and treatment plants.

- Share the knowledge and experience gleaned from evaluations of pilot projects.

## **A2. Solid Wastes**

A considerable amount of headway was made over the course of the fourth year of the PPES in boosting participation by the private sector in the operation of solid waste collection services. Moreover, nationwide development efforts in the solid waste sector continue at a steady pace.

The program for the promotion of private participation in the operation of waste collection services has reached maturity and its outputs have exceeded PPES targets. As of April 1, 1997, 43 city governments had entered into contracts with private enterprises and another 17 contracts were under consideration or negotiation. Progress on the sanitary landfill program is still being hampered by certain institutional and financial bottlenecks which are slowing down its implementation.

Progress in this sector during the past fiscal year was concentrated in the following four areas:

- Mounting of a pilot project for the contracting out of solid waste collection services for the city of Sousse, with the corresponding contract signed with the private service operator in September of 1996 and service operation under the contract commencing in January of 1997.
- Evaluations of four pilot projects for the contracting out of waste collection services, which concluded that, as a whole, the objectives set by city government officials had been met and found an improvement in the quality of waste collection services rendered to the local population.
- Completion of scheduled studies and, more specifically, the study of cost recovery mechanisms for solid waste management services, the study of PMUs (performance monitoring units) and the drafting of specifications, operating requirements and a standard contract for the operation of a sanitary landfill.
- Conduct of training activities focusing on contracting procedures and management techniques for the operation of sanitary landfills.

However, very little progress was made over the course of the past year in shaping the institutional and regulatory framework in this sector. The existing institutional framework, consisting mainly of the Organic Act of 1995 and the solid waste department attached to the National Environmental Protection Agency (the ANPE), has done little to help clear up persistent ambiguities with respect to the management of sanitary landfills and other issues. The first step in strengthening the regulatory framework in this area is the drafting of implementing regulations under the framework solid waste act, which has yet to be accomplished. The lack of a financing and cost recovery system continues to hamper efforts to meet nationwide targets under the national solid waste program. Furthermore, implementation of the pilot sanitary landfill program in Sousse is being held up by land tenure problems, which need to be settled within a reasonable time frame.

The following recommendations for priority actions are designed to bolster efforts to get private enterprise involved in the solid waste sector and ensure the sustainability of these efforts:

- Speed up efforts to frame implementing regulations under the solid waste act, particularly regulations governing the commissioning, management, monitoring, shut down and rehabilitation of landfills.
- Clarify the institutional framework for the management of sanitary landfills through operational decisions grounded in previously conducted studies of cost recovery, financing and monitoring mechanisms.
- Establish a cost recovery system for the operation of sanitary landfills and other facilities. The compelling need for such a mechanism cannot be overemphasized considering how the first such landfill, which is currently under construction, should be operational in a matter of a few months.
- Set up performance monitoring units or PMUs in line with recommendations produced by the study conducted under the PPES calling for the establishment of PMUs at the nationwide, regional and local levels to monitor contract performance by private service operators.
- Resume work on the pilot project for the Sousse landfill by clearing up corresponding land tenure problems. Prompt action in this respect is essential in light of the decision to shut down the city's old, obsolete landfill.
- Keep all existing project monitoring structures in place, particularly the working group on solid waste management attached to the Ministry of the Environment and Land Use Planning.
- Establish performance-based rather than cost-based contracts with private service providers subject to one year of satisfactory performance by the contractor in question. This approach has the dual advantage of improving service delivery by the private operator while, at the same time, reducing contract management and auditing costs.
- Extend the term of refuse collection contracts with private service operators to five years, which would operate as an incentive for more private enterprises to get involved in the solid waste sector.
- Announce the time and place for the public opening of bids tendered under competitive bidding procedures for the privatization of solid waste projects.
- Get the private sector more involved in training activities, both as a recipient and as a service provider, to help meet perceived training needs, which are sizeable.
- Draw conclusions and share information and knowledge gleaned from evaluations of pilot projects and take appropriate measures to replicate and institutionalize these experiences.

### **A3. Land Development**

The following headway was made on the land development component during the course of the fourth year of the program period:

- Approval of the project and its corresponding financing plan by the Sousse City Council.
- Raising of a portion of the necessary financing for the development of vacant tracts of land and the depositing of corresponding funds into a special CPSCCL account (the Local Government Development and Lending Agency).
- Appointment by the mayor of Sousse of a project manager from among officials attached to the city's public works department and stepping up of land tenure and land use studies by this same city government agency.
- Framing of a tripartite management agreement between the national government, the city government, the Local Government Development and Lending Agency (the CPSCCL) and the Housing Bank establishing management, monitoring and cost recovery procedures.
- Approval by the city government of an operational strategy in lieu of exercising the government's power of eminent domain.

Site preparation work cannot be effectively undertaken until corresponding land owners have been officially notified of the city government's decision to mount the project, of corresponding project implementation procedures and of all applicable conditions and arrangements for their participation in the envisioned undertaking, which cannot be done until after the signature of the implementing agreement by the city government of Sousse and the ARRU.

Up until this point, preparations for this pilot project have included no formal arrangements for the involvement of private land owners in discussions of the project by interested government agencies.

The start-up in El Matar of envisioned site preparation work under a partnership arrangement between the city government and the private sector is contingent upon the establishment of an alliance with corresponding land owners for the mounting of a development project encompassing all tracts of land within the area covered by the duly approved detailed development plan.

Thus far, efforts to step up private participation in the provision of serviced sites under a partnership arrangement between the city government and the private sector have been unsuccessful in meeting program objectives in this respect in the sense that site preparation works in furtherance of these objectives have not progressed at a fast enough pace for the pilot project to physically confirm the feasibility of the recommended approach.

The major accomplishment in this respect has been the successful mobilization of all interested stakeholders in this "new style" partnership between the public and private sectors for the provision of serviced sites.

The conduct of a study designed specifically for the crafting of an institutional and financial arrangement clearly spelling out the rights and obligations of each interested stakeholder and corresponding cost recovery procedures and payment systems is probably the best way to assure the sustainability of activities recommended under the PACT in furtherance of this innovative approach to the mounting of sites and services projects in Tunisia.

The following recommendations take into account the progress made on the land development component to date and the various types of problems hindering efforts in this area:

- Arrange for the signature of the implementing agreement between the ARRU and the city government of Sousse as soon as possible.
- Secure approval of the tripartite financing arrangement between the national government, the city government of Sousse and the Housing Bank.
- Stage a consciousness-raising campaign to familiarize the public with the land development project for El Matar prior to the actual start-up of site preparation work.
- Keep the working group on land development attached to the Bureau of Local Government at the Tunisian Ministry of the Interior in place beyond the scheduled completion date for the PPES to continue to explore financing facilities grounded in partnerships with the private sector and share the findings by this working group through broad-based discussions held within the framework of a workshop to be conducted sometime before the end of 1997.
- Raise necessary funding to continue to provide needed technical assistance services throughout the period prior to the start-up of site preparation work.

**B. Objective 2: Participation by the Private Sector in the Financing of Urban Environmental Services**

Most of the progress made in furtherance of this objective during the course of the fourth year of the program period was in the following areas:

- Conduct of a feasibility study of "BOT" (build-operate-transfer) arrangements spurring the Tunisian government to endorse this type of financing arrangement for the Tunis-West sewage treatment plant for the Greater Tunis area.
- Completion of scheduled studies and, more specifically:
  - ▣ Establishment of a financing facility for urban infrastructure;

- Conduct of an exploratory study of private sources of finance for urban environmental services, which should lead to the identification of a pilot project for the private financing of a specific urban service.
- Conduct of a seminar on “BOT” arrangements.
- Organization of a round table discussion on infrastructure financing by the Ministry of International Cooperation and Foreign Investment.

The FODEP (the Environmental Pollution Control Fund) continued to play a catalytic role in the promotion of private investment in the mounting of industrial pollution abatement programs and the creation of new private enterprises providing waste handling services.

As of April 30, 1997, investments in this area totaled 19.75 million dinars, 80% of which (13.4 million dinars) were furnished by the private sector and including 3.35 million dinars in financial aid extended by the Environmental Pollution Control Fund.

The Tunisian government’s interest in fostering the private financing of urban infrastructure was confirmed at the highest levels of government by the President himself speaking to the Tunisian House of Representatives on December 28, 1998. In fact, the sewage treatment plant for the Western District of Tunis is scheduled to be financed under a “BOT” arrangement.

The following recommendations are geared to ensure the successful attainment of this objective:

- Take appropriate measures to ensure that findings from studies of financing arrangements are duly implemented.
- Publicize knowledge and information gleaned from the mounting of pilot projects.
- Strengthen consciousness-raising activities in regard to the Environmental Pollution Control Fund (FODEP) and the Environmental Credit Fund (FOCRED).
- Make FODEP and FOCRED funding available for the construction of landfills for the disposal of solid wastes and sewage treatment plants.
- Make FODEP funding available for the mounting of training programs developed by private enterprises in the areas of environmental management and pollution control.
- Consider financing arrangements other than national government funding for landfills not included in programs scheduled to be mounted under the Ninth Plan.

### **C. Objective 3. Institution Building**

Progress in institutional capacity building continued throughout the fourth year of the PACT. Program coordination and implementation committees (consisting mainly of representatives of the Ministry of Economic Development, the Ministry of the Interior, the Ministry of Environment and Land Use Planning and the Ministry of Infrastructure and Housing)

and working groups held regular meetings and continued to play a catalytic role in the study and framing of strategies for the promotion of private participation in environmental services.

The study of PMUs for the solid waste sector conducted under the PPES should facilitate efforts to set up PMUs to monitor performance under contracts entered into with private service operators.

Apparently, a special effort will need to be mounted to strengthen the existing PMU at National Sewerage Agency headquarters and to set up new PMUs to monitor performance in the solid waste sector.

The training of National Sewerage Agency and National Environmental Protection Agency officials and officials in certain city governments played an important part in institution building efforts.

**D. Objective 4. Promote Community Participation in Activities Designed to Heighten Public Awareness of Environmental Issues**

The fourth year of the PACT was marked by stepped up community participation in countrywide efforts to heighten public awareness of the importance of protecting the environment.

A paper on the GESCOME experience in Sousse was presented to representatives of NGOs working in the fields of environment and development meeting in Hammamet in late March of 1997 to frame a strategy for the World Environmental Fund's microlending program.

NGOs are becoming more and more of a driving force in consciousness-raising efforts in regard to environmental issues.

The sharing of their front-line experiences with prospective donors helped secure additional funding for the mounting of new projects.

The Kairouan Association for the Protection of Nature and the Environment and the Women and Environment Alliance are two examples of organizations which are currently conducting projects designed to improve the quality of life for local area residents, both of which endeavors are being backed by Canadian funding.

The World Bank and the Tunisian government are championing the mounting of microprojects grounded in participatory arrangements under the PDM2 and have earmarked approximately 7 million dinars in funding for these types of operations.

**E. Allowable Spending**

The allowability of spending on program activities justifying the release of 10 million dollars in program funding is discussed in detail in a separate report.

In all, the Tunisian government spent more than 12 million dinars during the period from May of 1996 through April of 1997.

Field-level surveys conducted in an effort to confirm that the incomes of corresponding target groups were below the median income verified the allowability of more than 10 million dinars worth of spending. All spending whose allowability was in doubt was systematically disallowed.

The opinion poll conducted by the evaluation team to measure the satisfaction of program recipients produced the following findings:

- Living conditions for target groups have been improved through the construction of roads and sewerage facilities and, in some cases, through the installation of storm water drainage systems or street lights in their respective neighborhoods.
- The local governments with jurisdiction over these areas have raised the level of service provided in these neighborhoods, particularly as regards urban health and sanitation services.

#### **F. Sustainability**

There was also definite progress in institutional strengthening activities, which are the cornerstone of the program's sustainability. The PPES coordination and implementation committees have played a catalytic role in the study and framing of strategies for stepping up private participation in environmental services.

The establishment of a PMU at National Sewerage Agency headquarters, an El Matar project monitoring unit at the Ministry of the Interior and an urban program monitoring and supervision unit attached to the Ministry of Economic Development should ensure the monitoring and evaluation of all corresponding operations. The strengthening of the recently established solid waste department attached to the National Environmental Protection Agency is a major achievement and will fill an important void in this area.

The mainstreaming of the solid waste sector as an integral part of the national economy, investments channeled into this sector and the new jobs created as a result of these investments are all important contributing factors to ensuring the program's sustainability.

Moreover, the inclusion of some of the innovative approaches developed under the PPES and of certain projects studied as part of the technical assistance services furnished under the PPES in the country's Ninth Development Plan should help ensure the sustainability of the impacts produced by program implementation.

Resulting cost recovery mechanisms and financing facilities will also help ensure its sustainability.

#### **G. Conclusions and Recommendations**

The evaluation team is satisfied with the progress of work on the PPES project.

The strategy for promoting private participation in the provision of environmental services was subject to an exhaustive study process, which was considered essential to better grasp the

type of processes to be set in motion within the sewerage, solid waste and land development sectors. The involvement of the private sector in the operation of environmental services is already a fact of life in areas such as household refuse collection and the operation of sewerage systems and sewage treatment plants.

To ensure its sustainability, existing program structures will need to pursue their work beyond the envisioned deadline for the conclusion of USAID technical assistance services.

The following recommendations by the review team take into account the findings produced by the two-day workshop on the evaluation and sustainability of HG-V/PPES program impacts conducted in Tunis on June 2-3, 1997, which is discussed in detail in a separate report.

- Complete all activities mounted under the program which are still pending.
- Follow up on ongoing studies of financing facilities.
- Pursue current studies of policy issues and financing and cost recovery mechanisms.
- Make necessary determinations on pressing matters such as the clarification of the institutional framework for the management of landfills for the disposal of solid wastes and corresponding financing and cost recovery mechanisms.
- Continue to provide needed technical assistance services for implementation of the land development project in El Matar and pursue efforts to mount sites and services projects grounded in partnership arrangements between local government and the private sector in other urban areas.
- Ensure implementation of the following three priority activities envisioned under the PACT:
  - ☐ Provision of technical assistance services to the city government of Sousse for the framing of a communication and consciousness-raising plan for implementation of the pilot project in El Matar.
  - ☐ Provision of technical assistance services for the selection of a private contractor to operate the sanitary landfill in Sousse.
  - ☐ Provision of technical assistance services to the National Sewerage Agency for the drafting of special conditions of contract, the examination of bids and the finalization of a concession agreement for the operation of a sewage treatment plant.

These activities could be financed by other lenders under a technical assistance arrangement to further ensure the sustainability of the PPES.

The pursuit and completion of PACT activities without a USAID presence would be the best indicator and assurance of the sustainability of the various operations mounted under the PPES.

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## SECTION I INTRODUCTION

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### A. Background

The purpose of conducting regular program reviews is to provide decisionmaking officials within the Tunisian government and at the USAID Regional Housing and Urban Development Office with an overview of the progress made by the program since its inception. The focus of the fourth annual program review is on activities carried out since the third annual review conducted in June of 1996.

The fourth program review was conducted over the period from May 16 to July 15, 1997 [sic] by the three-man team of Messieurs Phil Roark, Abdelkader Baouendi and Rachid Nafti.

The main background document used for program evaluation purposes was the Joint Plan of Action (PACT) for the PPES program, which contains a list of activities to be conducted and benchmarks to be attained by different agencies and organizations under the direction and supervision of various cabinet ministries and national government agencies. The project set up several management units, including a coordination committee, an implementation committee and working groups on sewerage services, solid waste handling, land development and community participation. The evaluation team met with numerous Tunisian government officials in agencies attached to the Ministry of the Interior, the Ministry of Economic Development and the Ministry of Environment, as well as with representatives of USAID and other lending agencies. It made field trips to the site of a number of ongoing project activities. The project has generated piles of documents containing technical reports and minutes of meetings, most of which documents were examined by the evaluation team.

In addition to assessing the progress of project activities, the urban finance expert for the project evaluation mission verified the allowability of spending by the Tunisian government justifying the release of 10 million dollars in program funding. This matter is discussed in greater detail in a separate report attesting to the compliance of corresponding spending with all applicable terms and conditions.

The report is divided into different sections corresponding to the four main program objectives, namely:

- To step up private sector involvement in the operation of environmental services
- To boost participation by the private sector in the financing of urban environmental services
- To clarify and strengthen the roles of government agencies in the management of contracts entered into with the private sector; and
- To promote community participation in activities designed to heighten public awareness of environmental issues pertaining specifically to urban areas.

The review is centered on a number of general focus areas such as progress in program implementation vis-a-vis PACT monitoring benchmarks, the efficiency of corresponding technical

assistance services, program sustainability and existing constraints liable to hamper the future progress of program activities.

The report takes into account the conclusions and recommendations produced by the two-day workshop on the evaluation and sustainability of HG-V/PPES program impacts conducted on June 2-3, 1997. A separate report is being drawn up on the proceedings of this workshop, which was attended by 60 Tunisian and international experts.

## **B. Overview of the PPES Program**

The goal of the PPES program is to bolster economic growth and social stability by improving environmental quality and housing conditions in urban areas in general and in poor neighborhoods in particular. The PPES program provides 3.7 million dollars in technical assistance funding and is backed by a 40 million dollar Housing Guaranty Program loan for the five-year project period from 1993 to 1998.

The objective of the program is to strengthen the coverage and efficiency of urban environmental services through stepped-up participation by the private sector. Efforts in furtherance of this objective are bolstered by Housing Guaranty loans for the funding of Tunisian government programs for the upgrading or expansion of environmental infrastructure in low-income neighborhoods and the establishment of policy measures, institutions and incentives designed to promote private participation in the provision of these services.

The Tunisian government's objectives in the area of environmental management, whose importance was personally underscored by President Ben Ali, were spelled out in the country's Eighth National Development Plan and include:

- Upgrading environmental services in urban areas
- Stepping up participation by local governments, the private sector and local NGOs in the operation of these services

According to the PPES program, while direct government intervention may improve environmental conditions, only stepped-up participation by the private sector can fill gaps in the coverage of environmental services. The program seeks to expand the supply of key environmental services in quantitative terms by redefining the roles of government and the private sector through an examination of current policy in this area.

The National Sewerage Agency (the ONAS) currently plays a leading role in the delivery of key environmental services. This agency has made considerable progress in improving service coverage during the course of the past two decades, raising coverage rates for sewerage services in urban areas from a mere 15 percent to as high as 77 percent over the period from 1975 to 1995. A total of 48 sewage treatment plants were commissioned over the course of this same period. Thanks to SONEDE, the coverage rate for water supply services in urban areas is nearly 100 percent.

However, despite these efforts, there are still large gaps in service coverage, particularly in squatter settlements and small towns and villages. Over 23 percent of the nation's urban population is still not connected to a sewer system. Only a small percentage of residents of squatter settlements are connected to a sewer system, with untreated sewage produced in these

areas discharged into nearby streams and wadis. Refuse collection, which is supposedly the responsibility of local governments, poses an especially serious problem, with two thirds of all refuse disposed of in unregulated dumps, despite stepped-up assistance from the ONAS. The National Sewerage Agency's 200 million dinar investment program for the period from 1992 to the year 2006 falls well short of the approximately one billion dinars in aggregate investments required to bring existing sewerage services in line with Tunisian government standards.

Moreover, the project for the construction of landfills in the capitals of each of the country's 23 provinces is undercapitalized and, accordingly, cannot possibly assure an adequate level of service for the effective disposal of solid wastes.

### **C. Definition of the Concept of Sustainability**

In recent years, sustainability has come to be included as a leading objective of virtually all development projects. However, there are considerable differences of opinion as to the definition of this concept and, more importantly, as to how to achieve it and recognize it, where it exists. For purposes of the present review process, sustainability is defined as the existence of an institutional capacity within Tunisian government structures to further the objectives of the PPES project without relying on foreign aid (with the assistance or support of the private sector and local NGOs). Such a capacity requires an institutional mandate, a qualified staff consisting of an adequate number of skilled employees and adequate funding, materials and equipment. Thus, the main question as far as the sustainability of the PPES program is concerned is whether the Tunisian government has the capability to efficiently and effectively manage and promote private participation in environmental protection efforts and efforts to upgrade the urban environment.

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## SECTION II

### PRIVATE SECTOR INVOLVEMENT IN SERVICE OPERATION

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This section of the report deals with the first objective of the PPES program, which is to step up private participation in the operation of environmental services by getting private enterprise involved in three main areas, namely the sewerage, solid waste and land development sectors.

#### A. Sewerage Services

##### A1. Progress Made in Year 4 of the Program Period

Most of the progress made during the course of the fourth year of the PPES program in the sewerage sector was in the following areas: (1) selection of a private service provider and award of a contract for the operation of the sewerage system serving the El Menzah area; (2) publication of an invitation to bid for the award of a contract for the operation of sewage treatment plants in Nabeul and Hammamet (Plants 1, 2 and 3); (3) training in contracting procedures and contract management; (4) conduct of a feasibility study of a "BOT" arrangement for a sewage treatment plant; and (5) conduct of a feasibility study for cities not currently serviced by the National Sewerage Agency.

##### A1a. Contract for the Operation of the El Menzah Sewerage System

The National Sewerage Agency (the ONAS) signed its first contract for the operation of a sewerage system by a private enterprise with the firm known as SOMEDEN, which was created under a Tunisian/French partnership. The contracting process took approximately 16 months, from the publication of the invitation to bid to the actual signature of the contract per se (from September of 1995 to December of 1996). SOMEDEN began operating the El Menzah sewerage system in February of 1997.

The evaluation of this pilot project covering an area with a population of 40,000 inhabitants serviced by a 150 kilometer-long sewerage system or thereabouts deemed its performance during the first few months of operation by the private contractor to be satisfactory and found corresponding system cleaning operations to be acceptable and in keeping with the requirements spelled out by the ONAS. Very few complaints have been filed since the system was taken over by SOMEDEN, whose relations with the ONAS were considered satisfactory by the latter agency. Thus far, payments under the contract have been made on time.

However, the contract could be improved by clarifying the following points:

- The service operator is paid a fixed monthly sum rather than based on the actual volume of work performed or, in other words, at a specified rate per meter cleaned.
- There are no specifications in regard to the quality of corresponding cleaning operations.
- Repair work is required but is not specified in the contract.
- Envisioned penalties are unduly small.

In any event, the evaluation of this undertaking, which was conducted only a few months after the system was taken over by the private contractor, is premature and cannot possibly judge the performance of the private service provider with any degree of accuracy. The physical condition of the El Menzah sewerage system is above-average and its operation requires no special qualifications on the part of the service provider. The system is relatively new and has an acceptable slope, which reduces the likelihood of the contractor encountering any special problems. However, local residents are demanding better service. A follow-up evaluation is scheduled to be conducted in a year's time. As envisioned, the performance monitoring unit set up at the National Sewerage Agency to monitor the pilot project is already operational.

Moreover, according to the evaluation report, the contract entered into with the private operator at a cost of 2.1 Tunisian dinars per linear meter, compared with a cost figure of 3.5 dinars for the system's operation by the ONAS, produces substantial savings for the latter agency. The private operator maintains that its profits are minimal and that it would be in the best interests of both parties concerned to expand the size of the service area.

#### **A1b. Selection of a Private Contractor for the Operation of Sewage Treatment Plants**

In all, six firms responded to the invitation to bid, only one of which had a local partner. The bids are currently being examined by the High Commission for Government Contracting and the Central Bank. A private contractor will be selected in the next few weeks and will begin operating the plants sometime in July.

#### **A1c. Training Program**

Training in contracting procedures and contract management was conducted in February of 1997. Two separate training modules were drawn up and administered as part of the program, one on government contracting procedures and a second training manual on concessions for the operation of utility services.

Training in contracting procedures and contract management for the sewerage and solid waste sectors was given high priority under the training strategy developed in 1996 in anticipation of the expected "boom" in government contracting in both these areas.

#### **A1d. Feasibility Study of a "BOT" Arrangement**

Following up on a series of preliminary studies and the conduct of a corresponding workshop, a feasibility study for a concession agreement for a sewage treatment plant in western Sousse found that a concession or "BOT" (build-operate-transfer) arrangement for the operation of this facility was feasible and would lower current ONAS costs by 12%.

#### **A1e. Feasibility Study for Cities Not Currently Serviced by the ONAS, the National Sewerage Agency**

This study confirmed the feasibility of extending sewerage service to two groups of cities under partnership arrangements with the private sector, namely Group "A" cities or cities with populations of approximately 10,000 inhabitants scheduled to be serviced by ONAS-operated sewerage systems under the Ninth Plan, which services could be operated under a partnership arrangement with the private sector and Group "B" cities, consisting of smaller cities generating somewhat higher unit costs to which the ONAS has no current plans to extend service. The study

recommends a partnership between city governments and the private sector for service operation in these cities, with the latter to be in charge of the more difficult aspects of service operation.

### **A1f. Status of Specific PACT Activities**

#### **October 1995 to September 1996**

- Provision of technical assistance services to the National Sewerage Agency for the conduct of a feasibility study of a concession and/or BOT arrangement for a sewage treatment plant (PACT activity 1.F.II) The study report entitled "Feasibility study for a concession for a sewage treatment plant" was finalized in January of 1997.
- Provision of technical assistance services to the National Sewerage Agency for a feasibility study for the operation of sewerage services in cities not currently serviced by the ONAS by private contractors (PACT activity 1.F.V). The study, which focused on five cities not currently serviced by ONAS-operated systems, was completed in April of 1997.

#### **October 1996 to September 1997**

- Provision of technical assistance services to the National Sewerage Agency for the drafting of a standard concession agreement and/or BOT arrangement for a sewerage treatment plant and the establishment of corresponding contracting procedures (PACT activity 1.C.III). The officials in question decided to draw up a BOT arrangement rather than a standard concession agreement for the Tunis-West project.
- Provision of technical assistance services to the National Sewerage Agency for the evaluation of pilot sewerage projects (PACT activity 1.F.IV). As mentioned earlier in the report, the evaluation of the contract for the operation of the El Menzah sewerage system was completed in May of 1997.
- Training in the drafting and management of contracts for the operation of sewerage and solid waste collection services and the operation and management of a sanitary landfill (PACT activity 1.E.1). These training activities were completed in February of 1997.

#### **October 1997 to September 1998**

- Provision of technical assistance services for the drafting of special conditions of contract, the examination of bids and the finalization of a concession agreement for the operation of a sewage treatment plant (PACT activity 1.F.III). This future activity is highly recommended, but should focus on the drafting of a BOT arrangement.
- Provision of technical assistance services for the framing of a communication strategy for the private sector (PACT activity 1.D.III). A number of "one-off" activities have already been conducted in this respect. However, the review team recommends the systematic sharing of information and regular discussions with all parties concerned, as well as the dissemination of findings from all evaluations conducted in this area.

Annex A contains a complete list of PACT activities.

### **A1g. Other Previously Recommended Activities**

The working group had recommended the following measures during the course of last year's review process:

- Encourage members of the academic community to attend the seminar on BOT arrangements. Only a single such individual was actually invited to attend the seminar.
- Distribute reports to all group members far enough in advance for them to study the materials at their convenience. In fact, the reports in question were delivered at least a week before the scheduled date of the meeting.
- Solicit the opinion of government officials and legal experts on BOT arrangements. This objective was achieved in the course of the workshop conducted on this subject.
- Furnish information to project managers on the objectives and approaches for pilot projects. This task is still pending.
- Involve technical and administrative personnel, as well as personnel attached to legal and financial departments in training activities for the drafting and management of contracts. The accomplishment of this task was made possible by the selection of officials to take part in these training activities by the National Sewerage Agency.

### **A2. Efficiency of Technical Assistance Services**

National strategy for the sewerage sector. The Ninth Plan calls for the establishment of service contracts for the operation of 6 sewerage systems and 6 treatment plants. These contracts represent less than 5% of the overall length of National Sewerage Agency systems.

A study of the national strategy for the promotion of private participation in the operation of sewerage services in Tunisia conducted in April of 1996 under the PPES program recommended the mounting of pilot projects for the award of four types of contracts to private service providers:

- Operation of sewage collection systems
- Operation of sewage treatment plants
- Management of sewage treatment plants
- BOT arrangements for sewage treatment plants

The National Sewerage Agency outlined a series of activities to be conducted as part of a phased approach to the capitalization of these contracts, including a market survey, a feasibility study, a pilot project, an evaluation and replication efforts.

The following table recaps the status of activities mounted in the sewerage sector.

Activities	Operation of sewerage systems	Operation of sewage treatment plants	Concession agreement (BOT arrangement) for a sewage treatment plant
Feasibility study	Completed	Completed	Completed
Pilot project	El Menzah started up in February of 1997	Scheduled to be started up in July of 1997	
Evaluation	Completed		
Replication			

Progress in the conduct of PACT activities has been steady, if somewhat slower than expected. National Sewerage Agency officials consider the rate of progress on these activities to be perfectly normal, considering the novelty of the envisioned approach to the privatization of these operations as far as Tunisia is concerned and the need to proceed with due diligence. In any event, the progress of privatization efforts should speed up with the signature of the first contract for the operation of the El Menzah sewerage system and the imminent start-up of a second contract for the operation of sewage treatment plants. The technical assistance services furnished to the National Sewerage Agency in this connection were deemed satisfactory and allowed it to anticipate most of the problems presented by this process and to take appropriate action.

The National Sewerage Agency is scheduled to continue contracting with private service providers under the Ninth Plan in line with recommendations issued as part of the national strategy framed under the PPES. As previously mentioned, six contracts for the operation of sewerage systems and another six contracts for the operation of sewage treatment plants are scheduled to be entered into with private service providers.

Other lending agencies, including the World Bank, have announced their intention of providing financing for "BOT" projects. There is a pilot "BOT" project for a power plant already in progress, with other sectors planning to follow the lead of this project.

The annual review team found a noticeable improvement in the recycling of treated waste water for watering golf courses and irrigating farmland. Roughly 25 to 30% of all treated waste water is currently recycled, with the remainder discharged into streams or the sea. The National Sewerage Agency has taken great pains to mount demonstration and promotional activities to step up the recycling of treated waste water. Its goal is the recycling of 60% of all waste water by the end of the implementation period for the Ninth Plan. This volume of recycled water, which is the equivalent of two or three dams, would generate substantial savings. Treated waste water is currently distributed to interested users free of charge, who pay only for corresponding pumping costs. The plan calls for the phasing in of a payment system and the equipping of new treatment plants with special tanks for the storage of treated waste water.

### A3. Sustainability

Existing working groups in each PPES program area (sewerage, solid wastes, land development and community participation) and performance monitoring units are essential to the institutional strengthening activities required to ensure the program's sustainability. The working group on sewerage services has been holding regular meetings to discuss studies in this area and present its recommendations to the implementation committee. This approach has proven highly

effective. The working groups created under the program have played a catalytic role in the study and framing of strategies for the promotion of private participation in environmental services.

A performance monitoring unit (PMU) was set up at National Sewerage Agency headquarters during the course of 1996, headed by a chief engineer. Another local PMU headed by an engineer, seconded by an on-site inspector, was set up specifically for purposes of monitoring the pilot project in the El Menzah area. The role of these units is to monitor and evaluate services rendered by private service operators under their respective contracts. A report drawn up by PADCO, an outside consulting firm, defined the role, tasks, structure, staff strength and budget requirements for the effective operation of performance monitoring units or PMUs.

Corresponding performance evaluation criteria have already been established and will be incorporated in upcoming contracts to be entered into with private enterprises.

A financially sound National Sewerage Agency with a balanced budget is essential to the program's sustainability. Savings generated by contracts with private service operators and steady hikes in service charges should pave the way for future cuts in ONAS subsidies. The PADCO/EICO study of strategies for promoting sustainable progress in this sector set the following objectives:

- Cut back national government subsidies
- Lower operating costs
- Strengthen the management of the National Sewerage Agency
- Improve service quality
- Promote the growth of small and medium-scale enterprises

The National Sewerage Agency continued to show improvement over the course of the fourth year of the PPES program. It is a solid government agency which has taken on numerous challenges and is fully capable of ensuring the sustainability of program achievements.

#### **A4. Conclusions and Recommendations**

Each year, for the past four years, the annual review team has found lags in the progress of certain program activities vis-a-vis the timetable established in the PACT and, on each occasion, has recommended that a special effort be mounted to speed up work on these activities. This same recommendation applies to activities conducted over the course of the past year. Accordingly, the review team is proposing that all existing working groups remain in place until all corresponding activities can be successfully concluded, either under the PPES per se or under other financing arrangements. It is essential that these working groups be preserved at least until all pilot projects have been duly evaluated.

Last year's review team recommended the establishment of formal procedures for furnishing information to prospective bidders under competitive bidding procedures to help clear up any and all uncertainties or misunderstandings. Acting on this recommendation, the National Sewerage Agency organized a series of field trips for prospective bidders to the facilities in question and a number of changes were made in corresponding specifications. However, thus far, no announcements have been made of the time and place for the public opening of bids and the current review team strongly recommends making such announcements and holding a special meeting to notify all bidders of the contract awardee and the ranking of their bids.

The following recommendations by the review team take into account the recommendations presented at the workshop conducted on June 2-3, 1997 by the working group on sewerage services:

- Capitalize on the experience gleaned from pilot projects to streamline contracts and make them more coherent;
- Limit the time allotted for the awarding and signature of contracts to a period of from eight and ten months;
- Form packages of sewerage systems and sewage treatment plants to be operated under a single contract, considering how so many local and international firms are capable of operating both types of services simultaneously;
- Establish performance-based rather than cost-based contracts with private service operators;
- Expand the size of corresponding contracts to make them more attractive to private operators;
- Increase the number of contracts for the operation of sewerage systems and sewage treatment plants by private service providers to the equivalent of at least 1000 kilometers of sewerage lines and treatment plants serving an equivalent population of approximately 500,000 inhabitants by the end of the implementation period for the Ninth Plan;
- Form packages combining sewerage systems in small and large cities to be operated under a single contract, both to ensure larger returns for corresponding service operators and to afford an opportunity for smaller cities to reap the benefits of innovative approaches to the solution of their sewerage problems. Programs for the promotion of private participation in this sector should contain special provisions for the involvement of small and medium-scale Tunisian enterprises;
- Expand the El Menzah contract in volume terms by extending the boundaries of the corresponding service area (by up to 25%, which is the ceiling established under the contract) subject to a satisfactory service rating after one year of operation by the private contractor in question to allow for the generation of economies of scale.

## **B. Solid Wastes**

### **B1. Progress Made in Year 4 of the Program Period**

A sizeable amount of progress was made during the course of the fourth year of the PPES in the contracting out of solid waste collection services to private service operators. Moreover, nationwide development efforts in the solid waste sector are proceeding at a steady pace. The program for the promotion of private participation in the operation of waste collection services has reached maturity and its outputs have exceeded PPES targets. As of April 1, 1997, 43 city governments had entered into contracts with private enterprises and another 17 contracts were under consideration or negotiation. Progress on the sanitary landfill program is still being hampered by certain institutional and financial bottlenecks, which are slowing down its implementation. Most of the progress made in this sector over the course of the past fiscal year

was in the following areas: (1) mounting of a pilot project for the contracting out of solid waste collection services in Sousse; (2) evaluations of four projects for the contracting out of waste collection services; (3) completion of scheduled studies; and (4) conduct of training activities.

The leading activities conducted over the course of the fourth year of the project period were as follows:

**The pilot solid waste collection project in Sousse (PACT activity 1.F.VI)**, with the contract signed with the private service operator in September of 1996 and service delivery under the contract commencing in January of 1997. The selected contractor is a Tunisian firm known as SELTENE and the contract per se is for 361,000 dinars per year. The contract was awarded under a second competitive bidding process held in the wake of the cancellation of the original invitation to bid by the High Commission for Government Contracting. The Sousse city government received technical assistance under the PACT for the preparation of a corresponding feasibility study and bidding specifications, the conduct of a workshop to furnish information to prospective private service operators, the evaluation of bids and the drafting of the resulting contract. The cancellation of the first call for bids had no negative effects whatsoever either on the privatization process per se or on the progress of contracting operations for the privatization of waste collection services.

**Standard contract for the operation of a sanitary landfill (PACT activity 1.C.V)**. This study by RTI, a private consulting firm, which is still in progress, is designed to draw up necessary specifications and a standard contract for the operation of a sanitary landfill.

**Organization of a round table discussion on investment opportunities afforded by concessions for the operation of treatment plants and sanitary landfills (PACT activity 1.D.II)**. A major seminar was conducted in October of 1996 in an attempt to familiarize prospective private Tunisian and foreign investors with the concept of a concession (or "BOT" arrangement). The country's Ninth Development Plan provides for the mounting of a series of "BOT" (build-operate-transfer) projects.

**Design and administration of training modules in liquid and solid waste management (PACT activity 1.E.I)**. Two separate training modules on contracting procedures and the management of sanitary landfills were developed and administered in the course of February and March of 1997 respectively.

**Evaluation of four projects for the contracting out of solid waste collection services (PACT activity 1.F.IXa)**. This study designed to evaluate four projects mounted in Sousse, Monastir, Rades and Hammamet was conducted by RTI/SMART, a private consulting firm, in the course of April of 1997. The study team identified the various outputs and impacts generated by these pilot endeavors which, on the whole, were positive. In general, the privatization of solid waste collection services in these areas improved the quality of services rendered, despite a hike in corresponding costs in certain cases.

**Standard contract for the operation of solid waste collection services (PACT activity 1.C.IV)**. This study conducted by RTI/SMART in September of 1996 produced a standard contract for the operation of household refuse collection services by private service providers. It also spelled out each and every phase of the contracting process from the preparation of the invitation to bid to the award of the corresponding contract.

**Organization of performance monitoring and auditing units (PMUs) for the solid waste sector (PACT activity 3.C.IV).** This study conducted by the private consulting firm known as RTI/SMART during the course of April of 1997 spelled out the duties and powers of PMUs and the resources required for the successful operation of performance monitoring and auditing services. The study recommends the establishment of PMUs at the nationwide, regional and local levels.

**Study of cost recovery mechanisms for the solid waste sector (PACT activity 2.B.II).** This study, which was also conducted by the consulting firm of RTI/SMART, has just been completed. Its purpose was to trace out a strategy in this respect and recommend an appropriate cost recovery system. The study report was examined by the working groups on solid wastes and the implementation committee, both of which appear to be satisfied with its content.

**Other activities in the solid waste sector.** Considering the linkages between the PPES and national government policy on solid waste management, it is only fitting that this report include an overview of progress made in the implementation of the National Solid Waste Program (PRONAGDES), which was mounted the same year as the PPES.

- Construction of the Jbel Chekir sanitary landfill, is scheduled to open in early 1998
- Construction of four landfills in northern Tunisia
- Completion of engineering studies and reports on miscellaneous solid wastes for the construction of 23 landfills
- Study of a composting project to be mounted in Nabeul
- Construction of a waste transfer and household refuse sorting center in the province of Sousse
- Study for the construction of a hazardous industrial waste facility
- Selection of the site for an incinerator project
- Signature of contracts for the collection and transport of household refuse by 43 city governments, with another 17 contracts under consideration or negotiation
- Pursuit of the program for the shutdown and/or rehabilitation of garbage dumps
- Planning of works for the construction of ten sanitary landfills in the nation's leading cities under the Ninth Plan (over the period from 1997 to the year 2001)

## **B2. Efficiency of Program Activities**

The PACT continued to produce a leverage effect and play a catalytic role in the promotion of private participation in environmental services. It furnished needed technical assistance services for the successful mounting of efforts to privatize services in the solid waste sector. The Tunisian government has demonstrated a commitment to this endeavor and a willingness to encourage private enterprise to join in the operation and financing of environmental services and

the PACT has furnished the technical expertise needed to promote efficient and effective private participation in the solid waste sector.

Activities conducted under the PACT have helped lay the groundwork and establish propitious conditions for private participation in this sector by strengthening the technical, institutional and regulatory framework for solid waste management. According to interested stakeholders, the strategic studies conducted and technical assistance services furnished under the PACT for the mounting of pilot projects provided essential inputs for the refining of envisioned approaches, the stepping up of corresponding studies and the recommendation of alternatives for ironing out any problems hindering efforts to involve private enterprise in the solid waste sector.

The main indicator of the efficiency of PACT activities is the large number of contracts entered into by city governments with private enterprises for the operation of solid waste collection projects, with a total of 43 such contracts awarded for an aggregate value of over 4 million dinars per year. Another indicator of the efficiency of these activities is the number of new enterprises formed in the solid waste sector. According to data furnished by the National Environmental Protection Agency, numerous applications for FODEP assistance have been filed and eight firms were extended 771,315 dinars in financial aid at an investment cost of 3,856,575 dinars. Moreover, as mentioned above, there are another 17 contracts for the operation of waste collection services currently under consideration or negotiation.

Moreover, the fact that this steady progress in implementing the PACT was made possible by its efficient and effective administration by the program implementation committee is noteworthy, as are the important contributions made to this effort by the various working groups providing effective coordination and technical advisory services in their respective areas of expertise.

All parties concerned are unanimous in their recognition of the leverage effect produced by the PPES in promoting effective, sustainable participation by private enterprise in the solid waste sector.

### **B3. Sustainability**

As mentioned earlier, very little progress was made over the course of the past year in strengthening the institutional and regulatory framework, creating a pressing need to draft implementing regulations under the so-called "blueprint" or framework solid waste act and reinforce and/or clarify the existing institutional framework for the management of sanitary landfills, especially. The continued lack of a financing facility and cost recovery system for the solid waste sector is a major drawback, threatening the success and sustainability of programs mounted in this area. However, the sustainability of private enterprise involvement in the operation of solid waste collection services appears to be assured.

### **B4. Conclusions and Recommendations**

The conclusions drawn and recommendations formulated by the review team in this area are outlined in the following paragraphs.

**B4a. Conclusions**

1. A considerable amount of progress has been made in the solid waste sector.
2. PACT activities were carried out on schedule.
3. The pilot project for the sub-contracting of solid waste collection services in Sousse was started up in January of 1997, with the corresponding contract signed with the private service provider in September of 1996.
4. Evaluations of four sub-contracting projects for the operation of waste collection services showed that, as a whole, the objectives set by the city governments in question were successfully met and found noticeable improvements in the quality of services rendered.
5. The contracting procedure established under the waste collection pilot project mounted in Sousse was used as a model by other city governments entering into similar contracts with private service providers.
6. The landfill pilot project in Sousse was held up by land tenure problems.
7. There is an effort underway to draft implementing regulations under the framework solid waste act. Successful solid waste management in general and the due and proper management of sanitary landfills in particular are contingent upon the drafting of these regulations.
8. The institutional framework for the management of sanitary landfills should be clarified by operational decisions reinforcing the institutions established by the Organic Act for the Organization of Municipalities and the creation of a special solid waste department attached to the National Environmental Protection Agency.
9. The Ninth Plan provides for the construction of 10 sanitary landfills.
10. The cost recovery study conducted as part of the PPES traces out a strategy in this respect and recommends a cost recovery system to be used as the basis for operational decisionmaking with a view to ensuring necessary financing for the national solid waste program.
11. Existing contracts for the operation of waste collection services by private service providers have a drawback in the sense that they limit the inventive capacity of corresponding private entrepreneurs and their ability to improve service quality beyond the extent required under their contractual obligations.
12. Private contractors are complaining of payments by city governments oftentimes being as much as four months late.

**B4b. Recommendations**

The following priority measures would strengthen and assure the sustainability of activities geared to promote private participation in the solid waste sector:

1. Speed up current efforts to frame implementing regulations under the solid waste act and, more specifically, regulations governing the commissioning, management, monitoring, shut down and rehabilitation of landfills.

2. Clarify the institutional framework for the management of sanitary landfills through operational decisions grounded in previously conducted studies of cost recovery, financing and monitoring mechanisms.

3. Establish a cost recovery system for the operation of sanitary landfills and other facilities. The compelling need for such a system cannot be overemphasized, considering how the first sanitary landfill should be operational in a matter of a few months.

4. Set up performance monitoring units in line with recommendations produced by the study conducted under the PPES calling for the establishment of PMUs at the nationwide, regional and local levels to monitor performance by private contractors.

5. Resume work on the pilot project for the Sousse landfill by clearing up corresponding land tenure problems. Prompt action in this respect is essential in light of the decision to shut down the city's old landfill.

6. Keep existing project monitoring structures in place, particularly the working group on solid waste management attached to the Ministry of the Environment and Land Use Planning.

7. Establish performance-based rather than cost-based contracts with private service operators subject to one year of satisfactory performance by the private contractor in question. This approach has the dual advantage of improving service delivery by the private operator while, at the same time, reducing contract management and auditing costs.

8. Extend the term of waste collection contracts with private service operators to five years, which would operate as an incentive for more private enterprises to get involved in the solid waste sector.

9. Announce the time and place for the public opening of bids tendered under competitive bidding procedures for the privatization of solid waste projects.

10. Get the private sector more involved in training activities, both as a recipient and as a service provider, to help meet perceived training needs, which are sizeable.

11. Draw conclusions and share information and knowledge gleaned from evaluations of pilot projects and take appropriate measures to replicate and institutionalize these experiences.

## **C. Land Development**

### **C1. Progress Made in Year 4**

The following headway was made in land development efforts over the course of the fourth year of the program period:

1. Approval of the El Matar project by the Sousse City Council on July 17, 1996 in the wake of an agreement in principle by the Ministry of Economic Development for the prefinancing of the project component dealing with the development of vacant tracts of land in El Matar.

2. Raising of a portion of the necessary financing for the development of vacant land and the depositing of corresponding funds in the amount of 4.7 million dinars into a special CPSCCL account (the Local Government Development and Lending Agency).

3. Conduct of a study of cost recovery and payment systems and presentation of the study document for review by the technical committee on May 27, 1997 in search of the best options for ensuring the necessary complementarities and synergy between city government and the private sector for the implementation of land development projects with appropriate mechanisms for the recovery of corresponding infrastructure costs.

The information provided by this study and the draft agreement drawn up as part of activities mounted under the PACT served as the basis for negotiations between the city government of Sousse and the ARRU for the conclusion of a sound implementing agreement for the El Matar project with clear terms and conditions. Signature of the implementing agreement spelling out the technical assistance services to be furnished by the ARRU to the Sousse city government for its assumption of responsibility for the supervision of project works and technical project management is being held up by a number of differences of opinion with respect to the value of corresponding compensation and the human and physical resources to be allotted to this undertaking. These problems are still being ironed out. The last negotiation session held on May 27, 1997 ended without a final agreement being reached by the parties in question.

4. Approval by the Sousse city government of an operational strategy establishing a partnership with corresponding land owners in lieu of exercising its power of eminent domain in the wake of the expiration of the deadline for transferring title to the land development area to the city government as recommended by the third review team. This strategy is grounded in the provisions of the Land Use and City Planning Code and, where necessary, provides for the *ex officio* or automatic development of all vacant tracts of land located within the approved detailed development plan area affected by corresponding infrastructure works.

5. Crafting of a draft management agreement between the Tunisian national government, the city government of Sousse, the Local Government Development and Lending Agency and the Housing Bank establishing management, monitoring and cost recovery procedures for the component of the pilot El Matar land development project in Sousse dealing specifically with the development of vacant land. Negotiations for the conclusion of this agreement are still in progress.

6. Project approval for implementation under the Ninth Plan.

The following table shows the current status of recommendations formulated by the third review team.

Activities recommended by the third review team	Current status
Transfer of the working group on land development to the Ministry of the Interior, to be headed by a senior official attached to the Bureau of Local Government	Completed

Stepping up of efforts to secure approval for transferring title to the land development area to the city government of Sousse	Still pending
Pursuit of efforts to secure approval of the project financing plan and implementation of the plan in question	In progress
Appointment of a project manager / contracting authority	Completed
Organization of a project management unit attached to the Sousse city government and assignment of necessary personnel and equipment	Still pending
Holding of discussions with private land owners to solicit their assistance for the settlement of complex issues	Still pending

The appointment of a project manager by the mayor of Sousse from among officials attached to the city's public works department should not be construed as an indicator of the establishment of a project management unit within the Sousse city government, in that no such unit has as yet been set up by the local government. Nor has a corresponding agreement been signed as yet.

Moreover, a lack of specific information on the value of levies payable by each property owner and corresponding collection procedures is holding up the staging of the envisioned consciousness-raising campaign directed at interested land owners.

The value of levies payable by interested property owners and corresponding collection procedures cannot be established without accurate cost data for the various project components and the setting of specific criteria for the allocation of these costs to the various tracts of land targeted by the development project.

This sort of data can be furnished only by the project implementation studies whose performance or updating is contingent upon the signature of the implementing agreement.

There has been no progress in site preparation work since last year. None of the development work envisioned under the partnership formed between the city government and the private sector has actually been started up in El Matar.

The call for bids for the levelling of the bed of the Hallouf Wadi issued by the Urban Water Engineering Bureau attached to the Ministry of Infrastructure and Housing deals only with the downstream portion of the wadi between the sea and the El Matar city limits. It does not cover the El Matar area per se.

The appropriation of 800,000 dinars by the Ministry of Infrastructure and Housing to reclaim the bed of the wadi between El Matar and the sea through the construction of a drainage channel with an upstream retention basin, which was the engineering alternative endorsed by the government, evidently assures the financing of this project with national government funds.

Thus far, efforts to step up private participation in the provision of serviced sites through the formation of a partnership between local government and the private sector have been unsuccessful in meeting program objectives in this respect in the sense that site preparation work has not progressed fast enough for the pilot project to physically confirm the feasibility of this partnership arrangement.

The only progress made in this area has been on the pilot project in El Matar, which is on the verge of ironing out the last remaining problems holding up the start-up of corresponding works.

The major accomplishment by the program in this area has been the mobilization of all interested stakeholders to ensure the ultimate success of this "new-style" partnership with the private sector for the provision of serviced sites under the pilot project. This alliance, in turn, has helped further efforts to clarify corresponding concepts, study different mechanisms for the provision of serviced sites, raise a portion of the necessary funding for this endeavor and step up the production of small serviced sites for housing construction on city land.

A number of existing engineering studies will need to be updated, particularly studies of land values and urban infrastructure, to provide accurate cost data.

The following table shows the current status of PACT activities in this area.

PACT activity	Current status
1.F.XIb - Provision of technical assistance services to the Sousse city government for the holding of discussions with private land owners for the start-up of the El Matar partnership arrangement.	Still pending
2.A.II - Provision of technical assistance services to interested agencies for the development and launching of new financial instruments	Study of the Land Development Facility completed
1.F.XIa - Provision of technical assistance services to the Ministry of the Interior and the Ministry of Infrastructure and Housing for preparation and implementation of the El Matar project: (a) Advisory services and assistance (b) Study of cost recovery systems (c) Procedures for implementation of the land development strategy (d) Standard partnership agreement between the city government and private enterprises for land development work and monitoring of corresponding contracting procedures	Completed Completed Still pending Still pending
1.F.XId - Provision of technical assistance services to the Sousse city government for the framing of a communication and consciousness-raising plan for implementation of the El Matar project	Still pending

## C2. Efficiency of Technical Assistance Services

All parties involved in the PPES land development component have expressed their satisfaction with the technical assistance services furnished by the PPES under the PACT, particularly as regards the El Matar project. The following is an outline of the main outputs produced by technical assistance services furnished under the PACT during the course of the fourth year of the program implementation period:

- Clarification of cost recovery procedures and payment systems by the study conducted under the PACT;
- Advancement of the envisioned partnership between the private sector and local government for the provision of serviced sites through agreements in principle with respect to the project financing plan;

- Training in the implementation of the provisions of the new land use and city planning code for the provision of serviced sites by the Sousse city government;
- Strengthened cooperation and coordination by all interested stakeholders, particularly through the HG005 committees;
- Strengthened technical capabilities at the Sousse city government level and within the Bureau of Local Government attached to the Ministry of the Interior to handle problems associated with the implementation of sites and services projects;
- Study of a private financing facility (the so-called Land Development Facility) for the provision of urban infrastructure (this study is still in progress).

### **C3. Sustainability**

Unmet demands for serviced sites for low-income housing and the steady growth in unregulated housing construction on unimproved lands under conditions incapable of assuring an acceptable quality of life for residents of these areas have operated as catalysts for the mobilization of institutional stakeholders within the housing sector (the Ministry of Infrastructure and Housing, the Ministry of the Interior, city governments, the ARRU, the Housing Development Agency, banking institutions, the Local Government Development and Lending Agency), inspiring them to mount a special effort to step up the production of small serviced sites for housing construction.

The new partnership between city government and the private sector for the production of serviced sites with corresponding property owners fully sharing in associated land servicing costs has already been tested.

The simulated staging of operations under the partnership between the city government and the private sector of El Matar for the provision of serviced sites within the framework of a pilot project is a major accomplishment by the PPES. The mounting of this project should help enlighten decisionmakers as to the advantages and drawbacks of this innovative arrangement for the production of serviced sites and allow for an evaluation of the impacts of this arrangement on the housing sector in general and on the production of low-income housing in particular and for the testing of new devices for promoting private participation in the provision of serviced sites with built-in cost recovery mechanisms.

The study of an institutional and financial arrangement clearly establishing the rights and obligations of all interested parties and corresponding cost recovery procedures and payment systems should help assure the sustainability of activities recommended by the PACT in furtherance of this innovative approach to the mounting of sites and services projects in Tunisia.

The working group on land development attached to the Bureau of Local Government at the Tunisian Ministry of the Interior in charge of monitoring the El Matar project and the El Matar technical project unit in Sousse should help ensure both the program's sustainability and the advancement of the country's new approach to the production of serviced sites under partnerships between local government and the private sector.

#### C4. Recommendations

The following recommendations are grounded in an examination of the various activities mounted under the land development component of the PPES over the course of the fourth year of the program implementation period and talks with different stakeholders and other parties involved in the program:

- Arrange for the signature of the implementing agreement between the ARRU and the Sousse city government as soon as possible.
- Secure approval of the tripartite financing arrangement between the Tunisian national government, the Sousse city government and the Housing Bank.
- Mount a consciousness-raising campaign to heighten public awareness of the land development project in El Matar prior to the actual start-up of corresponding works.
- Keep the working group on land development attached to the Bureau of Local Government at the Tunisian Ministry of the Interior in place beyond the scheduled completion date for the PPES to continue to explore financing options grounded in partnerships with the private sector and share the findings by this working group through broad-based discussions held within the framework of a workshop to be conducted sometime before the end of 1997.
- Raise necessary funding to continue to provide needed technical assistance services for the El Matar project throughout the period prior to the start-up of corresponding site preparation work.
- Set up special development and land commissions for El Matar attached to the Sousse city government.
- Set up special streamlined procedures for the filing of necessary documents for the development of lands in El Matar.
- Take necessary measures to update existing land surveys and engineering studies to accurately establish the value of levies payable by each owner of lands affected by urban infrastructure works under corresponding cost-sharing mechanisms.
- Take immediate action to accurately demarcate public lands, determine their occupancy status and proceed with necessary formalities for their retrocession to the Sousse city government to be held in reserve for use in necessary trades for project implementation purposes.
- Frame draft legislation establishing the value of betterment levies and corresponding collection procedures.
- Begin mounting land development projects in other cities under similar partnership arrangements between local government and the private sector.

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### SECTION III PRIVATE FINANCING

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#### A. Progress Made in Year 4 of the Program Period

Most of the progress made during the course of the fourth year of the PPES was in the following areas:

- Conduct of a study of BOT arrangements, spurring the government to endorse this type of financing scheme for the Tunis-West sewage treatment plant.
- Completion of scheduled studies and, more specifically:
  - ▣ Development of a financing facility for urban infrastructure. This study was designed to serve as the basis for the development of an arrangement for the production of serviced sites equipped with urban infrastructure which can be readily subdivided and built on by public and private land developers and an efficient financing system to fund the production of these serviced sites.
  - ▣ An exploratory study of private financing facilities for urban environmental services. This preliminary general-purpose study was designed to help identify a pilot private financing project with a view to stepping up private finance for urban environmental services and infrastructure.
- Conduct of a seminar on "BOT" arrangements.
- Organization of a round table discussion on infrastructure financing by the Ministry of International Cooperation and Foreign Investment.

The FODEP (the Environmental Pollution Control Fund) continued to play a catalytic role in the promotion of private investment in environmental services and, more specifically, in stepping up private investment in industrial pollution abatement programs and in the creation of new private enterprises providing waste management services as part of ongoing environmental investment incentive efforts.

During the course of the fourth year of the PPES, the National Environmental Protection Agency (ANPE), which manages the FODEP, stepped up its efforts to encourage owners of industrial plants to get involved in activities designed to protect the environment by mounting special programs to control pollution generated by their industrial operations or waste collection and recycling projects.

Applications for the extension of financial aid by the FODEP have steadily mounted since the inception and provisioning of this fund, with the number of applications for financing filed with the ANPE jumping from 38 in 1994 to 69 in 1995, to a high of 78 in the year 1996, with corresponding reviews resulting in the approval of 9 applications in 1994, 21 applications in 1995, 40 applications in 1996 and 7 applications in the first two months of 1997, including eight applications for the financing of solid waste collection and recycling projects.

The FODEP, which has recently stepped up its operations, extends financial aid to eligible applicants for up to 20% of the value of investments in industrial pollution abatement programs or waste collection and recycling projects, who are also eligible for a sizeable amount of concessionary aid from the FOCRED (the Environmental Credit Fund), which will finance up to 50% of the value of corresponding investments.

In addition to the financial aid extended by the FODEP and FOCRED, the National Environmental Protection Agency has approved 96 out of a total of 185 applications reviewed to date for the extension of tax breaks under the provisions of the Environmental Investment Incentive Code.

The structure set up within the ANPE to manage the FODEP and the consciousness-raising activities mounted by the Ministry of Infrastructure and Housing directed at private enterprises, lending agencies, consulting firms and banking institutions have significantly strengthened operations by the Environmental Pollution Control Fund, as well as procedures for the granting of tax breaks for investments in environmental protection activities. This progress, in turn, has helped spur private investment in the provision of environmental services to some degree.

Investments in this area as of April 30, 1997 totalled 19.75 million dinars, 80% of which (13.4 million dinars) were furnished by the private sector and including 3.35 million dinars in financial aid extended by the Environmental Pollution Control Fund.

Forty or so city governments have awarded contracts to private enterprises for the operation of refuse collection services in portions of their respective service areas, promoting heavy private investment in this area.

The Tunisian government's interest in fostering the private financing of urban infrastructure was confirmed at the highest levels of government by the President himself speaking to the Tunisian House of Representatives on December 28, 1996.

## **B. Efficiency of Technical Assistance Services**

Studies conducted over the course of the third and fourth years of the PACT as part of the technical assistance services furnished under the PPES program laid the necessary groundwork for the progress made in the awarding of contracts for the operation of municipal waste collection services and the management of sewerage facilities in pilot project locations.

Ongoing studies of financing options are expected to:

- Help establish a private financing facility for urban infrastructure.
- Increase the volume of private finance for urban environmental services and infrastructure and identify a pilot project for the private financing of urban environmental services and infrastructure.

## **C. Sustainability**

The following program outputs should help ensure its sustainability:

- Studies of private financing facilities
- FODEP/FOCRED operations managed by a team of competent young professionals attached to the National Environmental Protection Agency
- Legislation establishing environmental investment incentives
- New enterprises operating environmental services
- Contracts entered into by city governments for the operation of refuse collection services by private service providers
- Trained city government and National Environmental Agency officials
- Reportedly promising achievements under corresponding pilot projects

#### D. Recommendations

The following recommendations are designed to spur efforts to step up private financing for urban environmental services and infrastructure:

- Consider financing arrangements other than national government funding ("BOT" arrangements) for landfills not included in programs scheduled to be mounted under the Ninth Plan.
- Provide for all necessary measures to ensure the follow-up of ongoing studies of financing options:
  - Establishment of a private financing facility for urban infrastructure
  - Exploratory study of private financing options for urban environmental services
- Share the information and knowledge gleaned from pilot projects
- Strengthen consciousness-raising activities in regard to the FODEP and FOCRED
- Get private enterprise more involved in the management of sewerage systems and allow it to play a more active role in cities not currently serviced by the National Sewerage Agency in which present sewerage services are inadequate
- Make FODEP and FOCRED financing available for the construction of landfills for the disposal of solid wastes
- Make FODEP financing available for the mounting of training programs in environmental management and pollution control developed by private enterprises
- Step up the advertising of opportunities for private participation in the financing of environmental services and infrastructure by city governments and corresponding contracting authorities

- Cut back National Sewerage Agency budgets and subsidies in line with anticipated savings under BOT arrangements and concession agreements for the operation of sewerage systems to encourage it to step up the use of innovative private financing schemes for the provision of environmental services

24

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## SECTION IV INSTITUTIONAL CAPACITY BUILDING

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The third objective of the PPES project is institutional capacity building or, more specifically, to clarify and/or strengthen the roles played by government agencies in the management of contracts entered into with the private sector.

### A. Progress

Most of the progress made during the course of the fourth year of the PPES project under the institution building component was in the following areas:

- Pursuit of the ongoing work of the coordination committee, the technical committee and the working groups, which held regular meetings and played a catalytic role in the study and framing of strategies for the promotion of private participation in the provision of environmental services and the financing of urban environmental infrastructure. These structures played a leading role in strengthening coordination by interested stakeholders and in laying the groundwork for necessary decision-making.
- The study of performance monitoring units (PMUs) for the solid waste sector defined the duties and powers of PMUs and the requisite resources for service delivery and performance monitoring purposes. The study recommended the establishment of PMUs at the nationwide, regional and local levels.
- The effective operation of the performance monitoring unit (PMU) attached to the ONAS (the National Sewerage Agency). There is a PMU in place at ONAS headquarters headed by a chief engineer, along with a local PMU manned by an engineer and an inspector. The local PMU is in charge of managing the contract entered into with a private service provider for the operation of the El Menazah sewerage system.
- The solid waste management department attached to the National Environmental Protection Agency (ANPE) is already operational and, as such, is overseeing and monitoring work under the national solid waste program.
- The training of officials attached to the ONAS, the ANPE and certain city governments in contracting methods and the management of sanitary landfills.

Two training modules dealing with contracting methods and the technical management of sanitary landfills were developed and administered over the course of February of 1997 in response to the need to strengthen the technical expertise of officials attached to government agencies and institutions responsible for the implementation of programs designed to promote private participation in sewerage and solid waste management services.

Moreover, NGOs have been playing a major institutional role in the environmental sector. The number of these organizations is constantly growing and they are continuously strengthening their capabilities. As a result, they are becoming an increasingly important factor within this sector.

**B. Efficiency of Technical Assistance Services**

All interested stakeholders are fully satisfied with the technical assistance services furnished under the institution building component of the PPES.

**C. Sustainability**

The PACT activities mounted over the course of the fourth year of the PPES helped strengthen program sustainability by establishing monitoring structures, administering training and recommending specialized tools for the management of contracts entered into with private enterprises for the operation of environmental services. The continued efficiency and effectiveness of the work performed by the PPES implementation committee is a good indicator of sustainability. The committee has successfully coordinated the mounting of various project activities involving large numbers of different agencies and organizations. The implementation committee has been holding regular meetings in an endeavor to monitor all work performed under the PPES over the course of the past year, thereby contributing to the steady progress made in project implementation over this period.

The studies conducted under the PACT on national strategies for the promotion of private participation in the liquid and solid waste sectors, which supplied valuable information which was used as input for the framing of the Ninth Economic and Social Development Plan for the period from 1997 through the year 2001, were another contributing factor to the promotion of sustainability. These strategies establish different private participation scenarios for a twenty-year period and provide important benchmarks for measuring the progress of efforts to foster private participation in environmental services. The solid waste management department set up as part of the National Environmental Protection Agency is another leading indicator of sustainability.

**D. Recommendations**

As a whole, progress under the institutional capacity building component in furtherance of the program objective spelled out in the PACT is quite satisfactory. The review team recommends setting up performance monitoring units for the management and auditing of contracts in the solid waste sector.

In light of the fact that a number of project activities and pilot projects have not yet been completed, the pursuit of technical assistance services for certain project activities and, more specifically, for the completion of the El Matar project and the follow-up of ongoing studies of financing facilities and the implementation of corresponding conclusions and recommendations is highly recommended.

**E. Other Foreign Lenders**

The current review included an evaluation of the relevance, complementarity and/or overlapping of the PPES with programs mounted by other foreign donors. There are three other donor agencies playing lead roles in the urban environmental sector, the German Agency for Technical Cooperation (GTZ), the World Bank (IBRD) and the United Nations Development Program (UNDP).

The GTZ is still actively involved in the implementation of the National Solid Waste Management Program (PRONAGDES), furnishing technical and financial assistance for the

design and construction of sanitary landfills and treatment plants. Rather than fostering private participation in the operation of liquid and solid waste management services, the assistance furnished by this agency is focused mainly on working together with the public sector in general and the ONAS in particular to promote development work within this sector. However, the GTZ is also helping to finance the Environmental Pollution Control Fund (FODEP) and the Environmental Credit Fund (FOCRED) which are designed specifically to promote pollution abatement programs and to boost private investment in environmental services. As indicated above, the FODEP is now fully operational and has already provided a substantial amount of funding to large numbers of recipients, including private firms specializing in the collection, transport and recycling of household refuse. Moreover, future operations by the FODEP will be supported by other international lending agencies such as the European Union.

The new International Center for Environmental Technologies inaugurated this past year with GTZ assistance as well as Swedish aid is designed to operate as a training facility and applied research center for the private as well as the public sector.

The World Bank, which continues to show a special interest in and is actively involved in promoting BOT arrangements, is expected to back the Tunis-West sewage treatment plant project.

The publication of the so-called National Report on the State of the Environment in Tunisia is another particularly noteworthy accomplishment. The report, which was crafted with GTZ and UNDP assistance and which is continuously being revised, provides an interesting analysis of environmental conditions in Tunisia.

The UNDP is furnishing ongoing assistance to the Ministry of the Environment and Land Use Planning for the mounting of monitoring and evaluation activities, including the so-called Tunisian Observatory for Environment and Development, consciousness-raising campaigns and training programs. This same organization is also bolstering efforts by NGOs to strengthen their capabilities and expand their operations in this area.

In sum, efforts by USAID to expand environmental services are paralleled by a host of other activities mounted by different foreign donor agencies. Together, these activities have enabled the country to make considerable progress in this area. The sharing of information and the coordination of efforts by these donor agencies is an important tool, whose usefulness and efficiency in preventing duplications of effort and the squandering of precious resources is universally recognized. Thus, in this sense, the PACT has helped minimize these sorts of problems by providing a transparent background document.

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**SECTION V**  
**COMMUNITY PARTICIPATION**

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**A. Progress Made in Year 4 of the Program Period**

Community participation in activities designed to heighten public awareness of the importance of environmental protection in Tunisia is being constantly stepped up.

In a speech delivered on the occasion of the celebration of National Associations Day, the Tunisian President personally underscored the important role of NGOs in this area in helping to bolster efforts mounted by government agencies and institutions.

Thus, the strategy for the promotion of partnerships between government agencies and NGOs is beginning to take shape at the grass-roots level as part of so-called environment and development projects conducted by NGOs.

There are various sources of financing for these sorts of activities, namely:

- National budget funds, in the form of grants furnished to NGOs
- Special program budgets funded by the Tunisian government and other donor agencies (such as the World Bank and the KfW)
- Special funds (the World Environment Fund, the CIP via the Regional Development Commission, the Canadian Fund and the Swedish Fund)

There was a surge in operations mounted by women's organizations such as the Women and Environment Alliance and the organization known as Female Action for Sustainable Development over the course of late 1996 and early 1997.

Tunisian NGOs are currently working with the UNDP and the World Environment Fund to formulate a communications strategy under which they are planning to publish a quarterly newsletter and get connected to the so-called Sustainable Development Network.

There is an operational capacity building program for NGOs currently in the preparation stage. Most of the financing for this program will be provided by the World Environment Fund, which is also bolstering efforts by NGOs to frame communication strategies, promote networking and mount grass-roots projects with the participation of target communities.

The Canadian, Swedish, Belgian, Italian and Japanese governments are all in the process of stepping up financial aid to Tunisian NGOs.

The timetable established by the PACT scheduled no specific activities for year 4 of the program period.

**B. Efficiency of Technical Assistance Services**

In general, the technical assistance services furnished under the PPES:

- Have helped reinforce the capabilities of NGOs
- Have helped establish a frame of reference for the promotion of partnerships between NGOs and government agencies and institutions in the environmental area through the strategy framing study
- Have helped formulate grass-roots initiatives grounded in the GESCOME approach for the implementation of microprojects

**C. Sustainability**

The main factors contributing to the sustainability of accomplishments in this area are as follows:

- The partnership strategy endorsed by NGOs and the Ministry of Environment and Land Use Planning
- The training administered to NGO officials within the framework of workshops conducted under the GESCOME and by the World Environment Fund
- The sharing of knowledge and experience gleaned from GESCOME projects mounted in Sousse on the occasion of the national workshop on the World Environment Fund microlending program strategy conducted by the Tunis office of the UNDP in Hammamet in March/April 1997
- The interest expressed by local and regional authorities in promoting community participation in the implementation of grass-roots projects designed to improve the quality of life in urban areas
- The incorporation of GESCOME-type activities as part of the second municipal development plan (PDM 2) formulated by the Ministry of the Interior and financed, in part, by the World Bank

**D. Recommendations**

The following recommendations are geared to helping NGOs play a more active role in efforts to heighten public awareness of environmental issues:

- Implement the action plan for the strategy approved back in 1996
- Strengthen training programs for senior NGO officials in project implementation and management techniques

**SECTION VI**  
**ALLOWABILITY OF PROGRAM SPENDING**

The following table presents a breakdown of reported spending by Tunisian government officials on programs designed to upgrade urban infrastructure and corresponding determinations of allowability under the HG005 lending program.

Activities	Spending in MD (millions of dinars)	Allowability
PNRQP	3.493	3 MD allowable
PNAQP	8.003	allowable
PDUI	0.776	allowable
Total	12.272	Total allowable spending = 11.779 MD

The aggregate value of government expenditures was 12.272 million dinars, producing a total of 11.779 million dinars in allowable spending. These expenditures were all made over the period from May of 1996 to April of 1997 and were not financed by any other foreign donor agencies.

The total target population benefiting from this spending is estimated at 9,500 households, or approximately 48,000 individuals.

Annex D contains an indepth report on the allowability of government spending.

Determinations of the allowability of program spending were made for a sample of 15 areas included in PNRQP, PNAQP and PDUI project pipelines established by the ARRU, the ONAS (the National Sewerage Agency) and the CGDR (the Regional Development Commission) respectively.

The following table presents data on the type of program involved and the overall status of works in each of these areas.

In general, the areas visited by the review team all have the following characteristics:

- With the sole exception of the Ras El Ain area of Zaghouan, they are all inhabited by low-income residents and, in addition to low-income housing, include a certain percentage of higher-category dwellings.
- Higher-category dwellings occupied by households with incomes above the median urban income account for roughly 10 to 15 percent of the housing stock of areas targeted by the PNAQP (the National Program for the Upgrading of Low-Income Areas).
- They were equipped with basic infrastructure under special programs for the upgrading or rehabilitation of low-income areas (the PNAQP and the PNRQP).

- The overwhelming majority of households in these areas have monthly incomes below 300 dinars, with the exception of the Zaghouan area and of roughly 10 to 15 percent of the dwellings in areas targeted by the PNAQP.
- Higher-category dwellings account for only a very small percentage of the housing stock of PDUI and PNRQP areas visited by the review team. The occupants of these dwellings were generally land owners in the area in question.

Households occupying the rare luxury residences located in these areas all had incomes above the median urban income. These dwellings, which cannot be physically excluded from corresponding infrastructure upgrading or rehabilitation projects, represent anywhere from 10 to 15 percent of the housing stock in these areas.

The project for the Ras El Ain area of Zaghouan encompasses a large number of so-called luxury residences located in the upper reaches of this area, which account for over 50 percent of the housing stock in this area.

Everyone interviewed in the areas visited by the review team agreed that the projects mounted in their neighborhoods had significantly improved their quality of life, specifically as a result of the installation of sewerage lines and the construction of streets and roads.

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## SECTION VII CONCLUSIONS AND RECOMMENDATIONS

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### A. Overview

The review team is satisfied with the progress of the PPES project. The strategy for promoting private participation in the provision of environmental services was subject to an exhaustive study process, which was considered essential to better understand the type of processes to be set in motion within the sewerage, solid waste and land development sectors. The involvement of private enterprise in the operation of environmental services is already a fact of life in areas such as household refuse collection and the management of sewerage systems and sewage treatment plants. To ensure program sustainability, existing PPES structures will need to pursue their work beyond the envisioned deadline for the conclusion of USAID technical assistance services.

The review team has formulated the following recommendations for future action under the PPES:

- Complete all activities mounted under the program which are still pending
- Follow up on ongoing studies of financing facilities.
- Pursue current studies of policy issues and financing and cost recovery mechanisms
- Make necessary determinations on pressing matters such as the clarification of institutional considerations with respect to the management of landfills for the disposal of solid wastes and corresponding financing and cost recovery mechanisms
- Continue to provide technical assistance services for implementation of the El Matar project and pursue ongoing efforts to mount sites and services projects grounded in partnership arrangements between local government and the private sector in other urban areas
- Ensure implementation of the following three priority activities envisioned under the PACT:
  - Provision of technical assistance services to the city government of Sousse for the framing of a communication and consciousness-raising plan for implementation of the pilot project in El Matar
  - Provision of technical assistance services for the award of a contract to a private service provider for the operation of the sanitary landfill in Sousse
  - Provision of technical assistance services to the National Sewerage Agency for the drafting of special conditions of contract, the examination of bids and the finalization of a concession agreement for a sewage treatment plant

These activities could be financed by other donor agencies under a technical assistance operation to further strengthen the sustainability of the PPES. The pursuit and completion of

PACT activities without a USAID presence would be the best indicator and assurance of the sustainability of the various operations mounted under the PPES.

The annual review process is designed to provide answers to a number of specific questions to measure the extent of the progress made in furtherance of PPES program objectives. The following paragraphs recap the answers provided by the review process.

## **B. Attainment of PPES Objectives**

### **B1. Operation of Environmental Services by Private Enterprises**

The government has already signed one contract with a private service operator in the sewerage sector and is on the verge of signing a second contract, with ten more contracts scheduled to be awarded during the course of the Ninth Plan. It is highly likely that this process will result in a BOT agreement. PACT performance criteria call specifically for the conclusion of twelve contracts, as well as for a BOT project. Accordingly, efforts to meet corresponding performance criteria in this sector by the end of the implementation period for the Ninth Plan, or the year 2001, are progressing satisfactorily.

As far as the solid waste sector is concerned, 43 contracts have already been signed with private firms, with another 17 contracts currently under consideration or negotiation. PACT performance criteria in this sector call specifically for the conclusion of 12 contracts, as well as for a concession agreement for a sanitary landfill. Thus, outputs generated by project activities mounted under the solid waste collection component are already well ahead of corresponding targets, although the status of the sanitary landfill component is still in question.

Progress on the El Matar land development project in Sousse has been somewhat slower than on the other program components. This particular project is apparently more complex and is grounded in an innovative approach to the provision of serviced sites establishing a partnership arrangement between the city government and the private sector and providing for full cost recovery. The PACT calls for the mounting of one pilot project, as well as five additional projects. So far, we have seen nothing but informal attempts to explain the project to corresponding land owners and there has been no partnership arrangement concluded to date.

### **B2. Private Participation in the Financing of Environmental Services**

Several studies of this issue have already been conducted and there are two other studies currently under way. There has been tangible progress made in efforts to promote private participation in the financing of industrial pollution abatement programs and waste collection projects. The performance criteria established by the PACT in this area call for the framing of an investment financing policy and the development of corresponding financial instruments, neither of which tasks has been accomplished. The FODEP and an investment incentive code were established just prior to the start-up of PPES activities.

### **B3. Management of Contracts Awarded to Private Enterprises by Government Agencies**

The National Sewerage Agency has demonstrated its command of contracting techniques and its ability to successfully manage a service contract entered into with a private service provider. Several city governments have demonstrated the same abilities with respect to contracts

for the operation of waste collection services. However, the issue of the management of sanitary landfills continues to pose problems in the absence of clearly specified institutional responsibilities in this respect. The PACT calls for the attainment of efficient and effective contract management in all these areas.

#### **B4. Community Participation in Public Consciousness-raising Activities**

Several seminars have been conducted and a specific strategy has been formulated in this area. A pilot endeavor consisting of eight microprojects was mounted in two Tunisian cities with community participation. Several new NGOs have been established in the environmental sector. The PACT calls for the mounting of six pilot projects in this area.

#### **C. Progress Made over the Past Year and Sustainability of Corresponding Achievements**

The specific types of progress made and outputs generated by the PPES in this area were discussed in previous sections of the report. The sustainability of these achievements hinges on the identification of a specific institutional structure with the will, as well as the human and physical resources required to replicate the various project activities mounted to date.

ONAS has a well-deserved reputation within the sewerage sector. This agency has successfully implemented a private participation strategy, which is progressing slowly but steadily. A network of performance monitoring units has been set up to manage contracts entered into with private service providers. These factors ensure the sustainability of achievements in the sewerage sector.

City governments, which are in charge of the operation of waste collection services, are highly interested in promoting private participation in this area. The new solid waste management department attached to the National Environmental Protection Agency represents an important step forward in ongoing efforts to establish a nationwide institutional framework, although its functions could be more clearly spelled out. The training of city government officials in the management of sanitary landfills needs to be further strengthened to ensure that local governments are capable of successfully taking over this responsibility. This component appears to be sustainable. However, the responsibilities of all interested parties with respect to the management of sanitary landfills are still unclear.

On the other hand, it is somewhat more complicated to pass judgement on the El Matar land development project. After a weak start, the project has recently made tangible progress. Its innovative approach, ranking the city government as the first actor under a tripartite agreement with the national government and the banking industry, required an enormous amount of effort to persuade government officials of the merits of such an undertaking. The sustainability of this approach is not clearly assured.

A number of studies of private financing facilities have already been undertaken, several of which are still in progress. To date, there has been no tangible progress in this respect.

The successful management of contracts with private service providers by the National Sewerage Agency in the sewerage sector and city governments in the solid waste collection sector appears to be sustainable. On the other hand, the management of contracts for the operation of sanitary landfills continues to pose problems and, so far, cannot be considered sustainable.

Community participation in two cities has been quite good, and this process appears to be sustainable. In most cases, NGOs are faced with the difficult task of raising funding to finance and sustain their activities. The World Environment Fund, the World Bank and other donor agencies are encouraging NGOs' initiatives, but very few of these NGOs are self-sustaining.

The review team recommends the following measures specifically designed to ensure sustainability: (1) clarification of the institutional framework for the management of sanitary landfills; (2) training of city government officials in solid waste management; and (3) endorsement of the approach tested under the El Matar project.

#### **D. Implementation of Project Activities and Attainment of Monitoring Benchmarks**

The current review was conducted during the course of the fourth year of the five-year project period. Thus, it is reasonable to expect the percentage of work completed to be somewhere around 80 percent. It is premature for the review team to measure project performance against a set of performance indicators which, as a rule, are virtually meaningless until all project activities have been fully completed. However, the team members all feel that the PPES is on the right track to meet the various objectives spelled out in the PACT, although its more ambitious objectives may not be attained until the end of the implementation period for the country's Ninth Economic and Social Development Plan.

Other donor agencies appear ready to continue to provide needed technical assistance services for the successful attainment of these objectives. The German Technical Cooperation Agency is currently furnishing a substantial amount of aid to the Ministry of Environment to bolster its efforts in the sewerage and solid waste sectors. The World Bank is ready to provide backing for BOT projects. A number of donors are supplying financial assistance for various initiatives mounted by NGOs.

#### **E. Contribution of Technical Assistance Services**

A number of project activities have been bolstered by technical assistance services, including strategy framing studies, feasibility studies, studies for the setting of standards, studies of contracting procedures, studies of pilot projects and various evaluations. Although an integral part of this process, there has been no evidence of project replication, except in the case of waste collection projects. The review team feels that the technical assistance services furnished under the project have been of great help in heightening public awareness of environmental issues and in strengthening local capabilities and that they've played a catalytic role in boosting private participation in the provision of environmental services. It also appears that endeavors to coordinate with other donors have been effective in preventing duplications of effort. The team has duly noted the frequent presence of other donors at PPES seminars and their involvement in planning efforts.

#### **F. PACT versus Tunisian Government Objectives**

As indicated earlier in the report, the Tunisian government's objectives in this area are consistent with the objectives set by the PACT (in fact, the PPES is a joint undertaking by USAID and the Tunisian government), although many of these objectives will not be attained until the program's envisioned completion date sometime in September of 1998. The Tunisian government could speed up the progress of project activities, assuming that it is satisfied with the findings from performance evaluations of interested private service providers. However, the

government has made it clear that it intends to proceed with caution, given the many uncertainties associated with the types of sweeping changes required for the promotion of private participation in the environmental sector. Several specific recommendations in this respect are presented in relevant sections of the report.

### **G. Progress Made on Pilot Projects**

The PACT provides for the mounting of a series of pilot projects under each program component (initially in a single location, to be subsequently extended to five additional locations) involving sewerage systems, sewage treatment plants, waste collection services, landfills, land development schemes and community participation. There is one pilot project for the operation of a sewerage system by a private contractor presently in progress. Another project for the operation of a sewage treatment plant is about to be started up. There is a pilot project for the operation of waste collection services by a private contractor currently in the implementation phase and similar projects have been mounted by a number of city governments. The pilot project for the construction of a sanitary landfill is behind schedule. The El Matar land development project is still in the take-off phase. Another pilot project for the promotion of community participation is already in the implementation phase.

The following recommendations are grounded in the review team's appraisal of Tunisian government priorities:

- Assuming that the findings from evaluations of subsequent projects for the operation of sewerage systems and sewage treatment plants by private contractors are positive, the National Sewerage Agency (ONAS) should proceed with the implementation of full-scale rather than pilot projects and should increase the size of its contracts with corresponding private service operators.
- The number of contracts for the operation of solid waste collection services has already transcended the pilot project stage, considering the number of contract awards made to date. The management of sanitary landfills requires a policy decision with respect to corresponding managerial responsibilities, financing arrangements and the setting of standards prior to the mounting of any pilot projects in this area.
- The pilot project in El Matar is still in the take-off phase, although a certain amount of progress has been made on this undertaking. The signature of corresponding management and supervision agreements for project works is a must.
- While actively involved in the environmental sector, local NGOs are suffering from a shortage of Tunisian government funding. Other donor agencies are filling this gap by supplying these organizations with needed assistance. Thus, it is recommended that this assistance focus on technical areas with a view to strengthening the capabilities of these organizations rather than on the mounting of additional pilot projects.

### **H. Priorities for the Use of Remaining Funding**

There is still roughly US\$369,000 in available funding for the mounting of additional program activities. It is recommended that future efforts focus on the implementation of the following three activities envisioned under the PACT:

- Provision of technical assistance services to the city government of Sousse for the framing of a communication and consciousness-raising plan for implementation of the pilot project in El Matar
- Provision of technical assistance services for the award of a contract to a private service provider for the operation of the sanitary landfill in Sousse
- Provision of technical assistance services to the National Sewerage Agency for the drafting of special conditions of contract, the examination of bids and the finalization of a concession agreement for a sewage treatment plant

The majority of the remaining activities envisaged by the PACT are important and should be pursued to further ensure the sustainability of the outputs produced by the PPES.

#### **I. Progress on Environmental Impact Assessments**

Environmental impact assessments have been institutionalized by Tunisian legislation. Each year, the National Environmental Protection Agency has made significant progress in boosting the number of projects evaluated from the standpoint of their potential effects on the environment. To date, the ANPE has conducted over 700 such investigations, including 200 studies of land development projects.

ANNEX A

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JOINT PLAN OF ACTION (PACT)

**La Participation du Secteur Privé dans les Services Environnementaux (PPES)**

**PLAN D'ACTION COMMUN ( PACT )**

(Troisième Revision du 16/07/96)

**OBJECTIF 1: Accroître la participation du secteur privé dans la fourniture de services environnementaux urbains**

ACTIONS	ACTIVITES	POINTS DE REPERE	DATE	RESPONSABLE
D?finir l'organisation des march?s pour favoriser la participation du secteur privé dans la fourniture de services urbains environnementaux	1.A.I + Assistance technique aux organismes concern?s pour l'analyse de la structure des march?s susceptible de favoriser la cr?ation de soci?t?s priv?es dans la prestation de services environnementaux et de garantir des conditions de concurrence entre les soci?t?s ? cr?er	1.A.I - Analyse de la structure des march?s pr?par?e	12/94	Minist?re de l'Environnement et de l'Am?nagement du Territoir (MEAT)
	1.A.II + Assistance technique aux organismes concern?s pour l'identification des types de soci?t?s priv?es potentiellement interess?es	1.A.II - Types de soci?t?s potentiellement interess?es identifi?s	12/94	
B Etablir des mesures incitatives pour encourager l'entr?e d'entreprises priv?es, en particulier les PME, dans le secteur des services environnementaux urbains	1.B.I + Assistance technique aux organismes concern?s pour l'?tude sur l'application du Code des Investissements en vue de d?terminer les effets des crit?res d'?ligibilit? en ce qui concerne les types de soci?t?s priv?es interess?es aux services environnementaux urbains	1.B.II - Etude sur les crit?res d'?ligibilit? pr?par?e	2/94	Minist?re du D?veloppement Economique (MDE), MEAT
	1.B.II X Assistance technique aux organismes concern?s pour l'analyse des moyens d'augmenter l'acc?s au financement pour les soci?t?s priv?es qui se lancent dans le domaine des services environnementaux	1.B.II - Crit?res d'?ligibilit? adopt?s	9/94	
		1.B.III X Analyse des options financi?res pr?par?e	6/97	
		1.B.IV - Le fonds de d?pollution (FODEP) mis en place	3/95	MEAT
C Etablir et/ou modifier les proc?dures contractuelles dans les domaines de l'assainissement des eaux us?es et de la collecte et la d?charge des ordures m?nag?res pour mieux les adapter ? la participation du secteur privé	1.C.I + Assistance technique ? l'ONAS pour la pr?paration d'un contrat type de sous-traitance de l'exploitation d'un r?seau d'gouts et v?rification des proc?dures d'octroi du march?	1.C.II - Contrat type de sous-traitance de l'exploitation d'un r?seau d'gouts pr?par? et proc?dures de l'octroi du march? v?rifi?es	6/95	MEAT
	1.C.II + Assistance technique ? l'ONAS pour la pr?paration d'un contrat type de sous-traitance de l'exploitation d'une station d'?puration et v?rification des proc?dures d'octroi du march?	1.C.II - Contrat type de sous-traitance de l'exploitation d'une station d'?puration pr?par? et proc?dures de l'octroi du march? v?rifi?es	6/95	MEAT <i>meat</i>
	1.C.III + Assistance technique ? l'ONAS pour la pr?paration d'un contrat type de concession d'une station d'?puration et/ou CET et v?rification des proc?dures d'octroi du march?	1.C.III - Contrat type de concession et/ou CET d'une station d'?puration et proc?dures de l'octroi du march? v?rifi?es	6/97	MEAT
	1.C.IV + Assistance technique ? l'organisme concern? pour terminer la pr?paration d'un contrat type de sous-traitance de la collecte des ordures m?nag?res et v?rification des proc?dures d'octroi du march?	1.C.IV - Contrat type de sous-traitance de la collecte des ordures m?nag?res pr?par? et proc?dures de l'octroi du march? v?rifi?es	8/96	Minist?re de l'Int?rieur (MI) MEAT
	1.C.V X Assistance technique ? l'organisme concern? pour la pr?paration d'un contrat type de sous-traitance de l'exploitation d'une d?charge contr?l?e et v?rification des proc?dures d'octroi du march?	1.C.V - Contrat type de sous-traitance de l'exploitation d'une d?charge contr?l?e pr?par? et proc?dures de l'octroi du march? v?rifi?es	6/97	MI, MEAT

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## PLAN D'ACTION COMMUN ( PACT )

(Troisième Revision du 16/07/96)

### OBJECTIF 1: Accroître la participation du secteur privé dans la fourniture de services environnementaux urbains

ACTIONS	ACTIVITES	POINTS DE REPERE	DATE	RESPONSABLE
C Etablir et/ou modifier les procédures contractuelles dans les domaines de l'assainissement des eaux usées et de la collecte et la d?charge des ordures m?nag?res pour mieux les adapter ? la participation du secteur privé ( suite)	1.C.VI Assistance technique ? l'organisme concern? pour la pr?paration d'un contrat type de concession d'une d?charge contr?le et v?rification des procédures d'octroi du march?	1.C(6) Contrat type de concession d'une d?charge contr?le pr?par? et procédures de l'octroi du march? v?rifi?es	6/98	MI, MEAT
	1.C.VII Assistance technique ? l'organisme concern? pour la pr?paration d'un contrat type de partenariat municipalit? / promoteur privé pour l'am?nagement foncier et v?rification des procédures d'octroi du march?	1.C(7) Contrat type de partenariat municipalit? / promoteur privé pour l'am?nagement foncier et procédures de l'octroi du march? v?rifi?es	6/96	Minist?re de l'Equipement et de l'Habitat (MEH), MI
D Solliciter l'int?r?t du secteur privé pour les services environnementaux urbains	1.D.I Assistance technique aux organismes concern?s pour la pr?paration de tables rondes: identification de soci?t?s priv?es potentiellement intress?es; pour chaque type de soci?t? ? cr?er, pr?paration des ?tudes de pr?-faisabilit? sur les plans technique et financier (y compris les comptes d'exploitation pr?visionnels et le taux de rentabilit? interne)	1.D(1) Table ronde sur le march? potentiel et les mesures de soutien dans les domaines de la collecte et d?charge des ordures m?nag?res	12/95	MEAT, MI
	1.D.II Assistance technique aux organismes concern?s pour l'animation des tables rondes avec la participation d'experts et praticiens am?ricains	1.D(2) Table ronde sur le march? potentiel et les mesures de soutien dans les domaines de l'exploitation des r?seaux d'assainissement et des stations d'?puration	10/94	MEAT
	1.D.III Assistance technique pour l'?laboration d'une strat?gie de communication sur la participation du secteur privé dans les secteurs de l'assainissement et des d?chets solides	1.D(3) Table ronde sur les opportunit?s d'investissement dans le domaine de la concession des stations d'?puration et d?charges contr?l?es	3/97	MEAT, MI
		1.D(4) Table ronde sur les opportunit?s d'investissement dans l'am?nagement foncier	9/98	MEH, MI
		1.D(5) Strat?gie de communication ?labor?e	9/98	MEAT
E Etablir des mesures de soutien pour faciliter l'entr?e des entreprises priv?es, en particulier les PME, dans le secteur des services environnementaux urbains	1.E.I Assistance technique aux organismes concern?s pour l'?tablissement d'un programme de formation pour les promoteurs de projets concernant (1) l'exploitation des r?seaux d'?gouts et des stations d'?puration, et (2) la collecte des ordures m?nag?res et l'exploitation des d?charges contr?l?es	1.E(1) Programme de formation ?tabli	3/96	MEAT, MI
	1.E.II Assistance aux organismes concern?s pour d?velopper la prestation de services locaux de consultation dans la gestion des services environnementaux	1.E(2) X Stages et Sessions de formation effectu?s	6/97	
		1.E(3) X Bureaux d'Etudes locaux intervenant dans la gestion des services environnementaux	6/95	
F Etablir des projets de d?monstration de privatisation des services environnementaux dans des municipalit?s pilotes	1.F.I Assistance technique ? l'ONAS pour ?tablir les clauses sp?cifiques, analyser les offres et ?tablir le contrat final pour la sous-traitance de l'exploitation d'un r?seau d'?gouts et d'une station d'?puration	1.F(1) Exploitation d'un r?seau d'?gouts sous-trait?e ? une soci?t? priv?e dans un lieu donn?	10/96	MEAT
	1.F.II Assistance technique ? l'ONAS pour ?tudier la faisabilit? de la concession d'une station d'?puration et/ou d'une CET	1.F(2) Exploitation d'un r?seau d'?gouts sous-trait?e dans cinq autres lieux	12/98	MEAT
		1.F(3) Exploitation d'une station d'?puration sous-trait?e ? une soci?t? priv?e dans un lieu donn?	6/97	MEAT

## PLAN D'ACTION COMMUN ( PACT )

(Troisième Revision du 16/07/96)

### OBJECTIF 1: Accroître la participation du secteur privé dans la fourniture de services environnementaux urbains

ACTIONS	ACTIVITES	POINTS DE REPERE	DATE	RESPONSABLE
.F Etablir des projets de démonstration de privatisation des services environnementaux dans des municipalités pilotes (suite)	1.F.III Assistance technique ? l'ONAS pour ?tablir les clauses spécifiques, analyser les offres et ?tablir le contrat final pour la concession d'une station d'?puration	1.F(4) Exploitation d'une station d'?puration sous-trait?e ? une soci?t? priv?e dans cinq autres lieux	9/98	MEAT
	1.F.IV Assistance technique ? l'ONAS pour l'?valuation des projets pilotes en mati?re d'assainissement d'eaux us?es	1.F(5) Exploitation d'un syst?me d'assainissement des eaux us?es dans une petite ville non d?sservie par l'ONAS et dot?e d'un r?seau d'?gouts, sous-trait?e ? une soci?t? priv?e	6/96	MEAT, MI
	<del>1.F.V</del> Assistance technique ? l'ONAS pour v?rifier la faisabilit? de confier au secteur priv? l'exploitation de l'assainissement dans le cas des municipalit?s non prises en charge par l'ONAS(y compris celles d?sservies par un r?seau d'?gouts et non d?sservies par un r?seau d'?gouts)	1.F(6) Exploitation d'un syst?me d'assainissement des eaux us?es dans une petite ville non d?sservie par l'ONAS et sans r?seau d'?gouts, sous-trait?e ? une soci?t? priv?e	11/96	MEAT, MI
	<del>1.F.VI</del> Assistance technique au Minist?re de l'Int?rieur pour ?tablir les clauses spécifiques, analyser les offres et ?tablir le contrat final pour la sous-traitance de la collecte des ordures m?nag?res	<del>1.F(7)</del> Etude de faisabilit? pour la concession et/ou CET d'une station d'?puration r?alis?e	6/97	MEAT
	1.F.VII Assistance technique aux Minist?res de l'Environnement et de l'Int?rieur pour v?rifier la faisabilit?, ?tablir les clauses spécifiques, analyser les offres et ?tablir le contrat final pour la sous-traitance de l'exploitation d'une d?charge contr?l?e	1.F(8) Concession et/ou CET d'une station d'?puration r?alis?e	6/98	MEAT
	1.F.VIII Assistance technique aux Minist?res de l'Environnement et de l'Int?rieur pour v?rifier la faisabilit?, ?tablir les clauses spécifiques, analyser les offres et ?tablir le contrat final pour la concession d'une d?charge contr?l?e	1.F(9) Collecte des ordures m?nag?res sous-trait?e ? une soci?t? priv?e dans un lieu donn?	10/96	MI
	<del>1.F.IXa</del> Assistance technique aux Minist?res de l'Environnement et de l'Int?rieur pour ?valuer le projet pilote de sous-traitance de la collecte des ordures m?nag?res	1.F(10) Rapport d'?valuation du projet pilote de la Collecte des ordures m?nag?res ?tabli	6/97	MI
	1.F.IXb Assistance technique aux Minist?res de l'Environnement et de l'Int?rieur pour ?valuer le projet pilote en sous-traitance de l'exploitation d'une d?charge contr?l?e	1.F(11) Collecte des ordures m?nag?res sous-trait?e ? une soci?t? priv?e dans cinq autres lieux	5/96	MI
	<del>1.F.IXc</del> Assistance technique aux Minist?res de l'Environnement et de l'Int?rieur pour v?rifier la faisabilit?, ?tablir les clauses spécifiques, analyser les offres et ?tablir le contrat final pour la concession d'une station de compostage	1.F(12) Exploitation d'une d?charge contr?l?e sous-trait?e ? une soci?t? priv?e	12/97	MEAT, MI
	<del>1.F.IXd</del> Assistance technique au Minist?re de l'Equipement et de l'Habitat pour ?valuer les r?sultats des partenariats actuels et pour pr?parer le projet pilote en am?nagement foncier	1.F(13) Rapport d'?valuation du projet pilote d'exploitation d'une d?charge contr?l?e ?tabli	9/98	MEAT, MI
	1.F.IXe Assistance technique au Minist?re de l'Equipement et de l'Habitat pour la pr?paration, l'ex?cution et l'?valuation du projet pilote en am?nagement foncier	1.F(14) Concession d'une d?charge contr?l?e r?alis?e	12/96	MEAT, MI
		1.F(15) Concession et exploitation d'une station de compostage mixte r?alis?e	9/98	MEAT
		1.F(16) Evaluation des partenariats pr?par?e	3/94	MEH, MI
		1.F(17) Partenariat d'am?nagement foncier impliquant un lotisseur priv? et une municipalit? ?tabli	7/97	MEH, MI
	1.F(18) Partenariat d'am?nagement foncier ?tabli dans cinq autres lieux	9/98	MEH, MI	

## PLAN D'ACTION COMMUN ( PACT )

(Troisième Revision du 16/07/96)

### OBJECTIF 1: Accroître la participation du secteur privé dans la fourniture de services environnementaux urbains

ACTIONS	ACTIVITES	POINTS DE REPERE	DATE	RESPONSABLE
F Etablir des projets de démonstration de privatisation des services environnementaux dans des municipalités pilotes (suite)	<p><del>F.XI.b</del> Assistance technique ? la Municipalité de Sousse pour l'organisation d'une concertation avec les privés propriétaires des terrains pour le lancement de l'opération de partenariat ? El Matar</p> <p><del>F.XI.c</del> Assistance technique ? la Municipalité de Sousse pour la préparation d'un document de projet pour El Matar</p> <p><del>F.XI.d</del> Assistance technique ? la Municipalité de Sousse pour la préparation d'un plan de communication/sensibilisation pour la mise en oeuvre du projet El Matar</p>	<p><del>F(20)</del> Atelier de Concertation organisé</p> <p><del>F(21)</del> Document du projet d'El Matar ?labor?</p> <p><del>F(22)</del> Plan de communication pour El Matar préparé</p>	<p>12/96</p> <p>10/95</p> <p>6/97</p>	<p>MEH, MI</p> <p>MEH, MI</p> <p>MEH, MI</p>

### OBJECTIF 2: Accroître la participation du secteur privé dans le financement des services environnementaux urbains

A Introduire des obligations et/ou d'autres instruments financiers afin de couvrir les coûts d'investissement des infrastructures de protection de l'environnement urbain	<p>2.A.II+ Assistance technique aux organismes concernés pour l'évaluation des besoins supplémentaires de financement</p> <p>2.A.II X Assistance technique aux organismes concernés pour l'analyse (coûts/avantages, faisabilité administrative, impact fiscal) des options pour recourir aux marchés tunisiens et étrangers</p> <p>2.A.III X Assistance technique aux organismes concernés pour la création et le lancement de nouveaux instruments financiers</p>	<p>2.A(1) Evaluation des besoins supplémentaires de financement en fonction des caractéristiques des travaux dans les secteurs de l'assainissement et des ordures ménagères</p> <p><del>2.A(2)</del> X Evaluation des options pour le financement des investissements achevés</p> <p>2.A(3) Politique de financement des investissements adoptée par le Ministère des Finances, la Banque Centrale, et le MDE</p> <p><del>2.A(4)</del> X Etude de faisabilité technique et institutionnelle sur les mécanismes de financement des bénéficiaires réalisés</p> <p>2.A(5) Premier instrument financier lancé sur le marché</p>	<p>3/95</p> <p>6/97</p> <p>1/96</p> <p>12/96</p> <p>6/96</p>	<p>MDE, MI</p> <p>Ministère des Finances(MF) MEAT</p> <p>MEH</p> <p>MDE, MF</p>
B Etablir des politiques de recouvrement des coûts et des politiques de subvention transparentes afin d'améliorer le recouvrement, auprès des bénéficiaires, des coûts d'investissement et d'exploitation des services environnementaux et de mieux cibler les subventions	<p>2.B.II+ Assistance technique ? l'ONAS pour une étude sur l'assainissement des eaux visant ? établir les coûts réels (exploitation et immobilisations), ? les comparer avec les revenus, ? identifier les avenues de solutions en matière d'augmentation du taux de recouvrement (redevances et autres) et le ciblage des subventions</p> <p>2.B.III+ Assistance technique aux organismes concernés pour une étude similaire sur les ordures ménagères</p>	<p><del>2.B(1)</del> X Etudes sur le recouvrement des coûts et les subventions préparées ( assainissement et ordures ménagères )</p> <p><del>2.B(2)</del> X Recommandations des études ( assainissement et ordures ménagères ) acceptées et implantées</p>	<p>3/97</p> <p>6/97</p>	<p>MEAT</p> <p>MI</p>

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## PLAN D'ACTION COMMUN ( PACT )

(Troisième Revision du 16/07/96)

**OBJECTIF 3: Atteindre, au niveau des ministres, des organismes spécialisés et des municipalités, une gestion efficace des contrats avec les sociétés privées pour la prestation de services environnementaux**

ACTIONS	ACTIVITES	POINTS DE REPERE	DATE	RESPONSABLE
A Appuyer les efforts du Ministère du Plan pour assurer un monitoring efficace du développement de nouvelles relations entre entités publiques et privées et du bilan de ces relations en matière de services environnementaux	3.A.II+ Assistance technique au Ministère du Plan pour créer une unité de monitoring et de suivi des programmes urbains	3.A(1)+ Unité de Monitoring et de Suivi des programmes urbains créée et pourvue en personnel	12/95	MDE
B Atteindre au niveau de l'ONAS une gestion efficace des contrats avec le secteur privé pour l'assainissement des eaux usées	3.B.I+ Assistance technique ? l'ONAS pour élaborer une stratégie nationale des services d'assainissement 3.B.II+ Assistance technique ? l'ONAS pour (1) vérifier les normes de performance pour le traitement des eaux usées et (2) établir les exigences pour l'exploitation des réseaux 3.B.III+ Assistance technique aux organismes concernés pour rédiger un guide de conception pour systèmes d'assainissement non-conventionnels ( technologies adaptées aux petites municipalités ) 3.B.IV+ Assistance technique et formation ? l'ONAS pour l'Unité de Contrôle de Performance (UCP)	3.B(1)+ Montage institutionnel en matière d'assainissement et de drainage urbain pour les petites municipalités 3.B(2)+ Stratégie nationale de la privatisation des services d'assainissement élaborée 3.B(3)+ Normes de performance pour le traitement des eaux usées vérifiées 3.B(4)+ Exigences pour l'exploitation des réseaux d'égouts établies 3.B(5)+ Guide pour la réalisation de systèmes d'assainissement non-conventionnels rédigé 3.B(6)+ UCP ? l'ONAS, créée et pourvue en personnel 3.B(7)+ Formation du personnel de l'ONAS, effectuée	6/96 9/95 6/94 1/94 9/98 7/95 12/95	MEAT
C Atteindre au niveau des Ministres de l'Environnement et de l'Intérieur, de l'ONAS, et de l'ANPE, une gestion efficace des contrats dans le domaine de la collecte, la déchèterie et le traitement des ordures ménagères	3.C.I X Assistance technique aux organismes concernés pour effectuer un montage institutionnel 3.C.II+ Assistance technique aux organismes concernés pour l'élaboration de la stratégie nationale de la participation du secteur privé dans la collecte, la déchèterie et le traitement des ordures ménagères 3.C.III+ Assistance technique aux organismes concernés pour continuer le développement des technologies rattachées aux ordures ménagères ( collecte, déchèterie, traitement ) et rédiger un guide de conception 3.C.IV+ Assistance technique aux organismes concernés pour établir des normes de performance et des moyens de contrôle pour la collecte, la déchèterie et le traitement des ordures ménagères 3.C.V+ Assistance technique et formation aux organismes concernés pour créer l'Unité de Contrôle de Performance	3.C(1) X Montage institutionnel effectué 3.C(2)+ Eléments de Stratégie de privatisation des services de collecte, de déchèterie et de traitement des ordures ménagères élaborés 3.C(3)+ Guide de technologies rattachées aux ordures ménagères rédigé 3.C(4)+ Normes pour la collecte et le traitement des ordures ménagères définies 3.C(5)+ Atelier sur les normes et la réglementation en matière de déchets solides organisés 3.C(6) X Unité de Contrôle de Performance (UCP) créée et pourvue en personnel 3.C(7)+ Programme National de gestion des déchets solides élaboré 3.C(8)+ Cadre réglementaire des Déchets solides établi	12/96 6/95 9/98 6/95 3/96 6/97 1993 4/96	MEAT MEAT, MI

## PLAN D'ACTION COMMUN ( PACT )

(Troisième Revision du 16/07/96)

**OBJECTIF 3: Atteindre, au niveau des ministres, des organismes spécialisés et des municipalités, une gestion efficace des contrats avec les sociétés privées pour la prestation de services environnementaux**

ACTIONS	ACTIVITES	POINTS DE REPERE	DATE	RESPONSABLE
D Renforcer la capacité des Municipalités de créer, en collaboration avec le Ministère de l'Équipement et de l'Habitat, des partenariats avec le secteur privé pour la production de lots viabilisés	<del>3.D.I</del> Assistance technique pour évaluer les options de renforcement du rôle des municipalités dans le processus de maîtrise foncière	<del>3.D.I</del> Evaluation des options de renforcement du rôle des municipalités dans le processus de maîtrise foncière préparée	9/94	MEH
	3.D.II Etude sur le rôle potentiel des partenariats dans la réhabilitation des réseaux de base et du bâti dans le tissu ancien	<del>3.D.II</del> Etude sur le rôle potentiel des partenariats dans la réhabilitation des tissus anciens préparée	9/98	MEH, MI
E Atteindre, au niveau des municipalités, une gestion efficace des contrats de sous-traitance des services environnementaux urbains	<del>3.E.I</del> Assistance technique aux organismes concernés pour renforcer les capacités des municipalités dans la sous-traitance de la collecte des ordures	<del>3.E.I</del> Actions de formation relatives à la sous-traitance de la collecte des ordures ménagères effectuées	10/94	MI
	<del>3.E.II</del> Assistance technique aux organismes concernés pour renforcer la capacité de confier l'exploitation des déchets contractuels au secteur privé	<del>3.E.II</del> Actions de formation relatives à la sous-traitance de l'exploitation des déchets contractuels effectuées	6/97	MEAT, MI
	<del>3.E.III</del> Assistance technique aux organismes concernés pour renforcer les capacités des municipalités dans la sous-traitance des systèmes d'assainissement des eaux usées	<del>3.E.III</del> Actions de formation relatives à la sous-traitance des systèmes d'assainissement des eaux usées effectuées	11/94	MEAT

## PLAN D'ACTION COMMUN ( PACT )

(Troisi?me Revision du 16/07/96)

### OBJECTIF 4: Accro?tre la participation communautaire dans le processus de sensibilisation en ce qui concerne l'environnement

ACTIONS	ACTIVITES	POINTS DE REPERE	DATE	RESPONSABLE
4.A Encourager la participation des ONGs dans les activit?s de sensibilisation en ce qui concerne l'environnement	<del>4.A.1</del> Assistance aux ONGs nationales concern?es par l'environnement pour des actions de sensibilisation des citoyens aux questions environnementales	<del>4.A.1.1</del> Actions de sensibilisation	12/95	MEAT, MI
4.B Renforcer le dialogue entre les organismes gouvernementaux et l'ensemble des ONGs concern?es par les questions environnementales	<del>4.B.1</del> X Financement de l'organisation de conf?rences tunisiennes avec la participation de dirigeants d'ONGs am?ricains concern?s par l'environnement	<del>4.B.1.1</del> 1?re Conf?rence Nationale ONGs/Minist?res de l'Environnement et de l'Int?rieur sur la politique de l'environnement, donn?e	9/95	MEAT
		<del>4.B.1.2</del> 2?me Conf?rence Nationale ONGs/Minist?res de l'Environnement et de l'Int?rieur sur la politique de l'environnement, donn?e	9/96	
		<del>4.B.1.3</del> 3?me Conf?rence Nationale ONGs/Minist?res de l'Environnement et de l'Int?rieur sur la politique de l'environnement, donn?e	6/97	
		<del>4.B.1.4</del> 4?me Conf?rence Nationale ONGs/Minist?res de l'Environnement et de l'Int?rieur sur la politique de l'environnement, donn?e	6/98	
	<del>4.B.1.5</del> Etablir une strat?gie nationale de participation des ONGs dans les activit?s environnementales	<del>4.B.1.5</del> Strat?gie ?tablie	8/96	MEAT, MDE, MI, MEH
.C Faire participer des ONGs ? des micro-projets pilotes dans la prestation de services environnementaux	<del>4.C.1</del> Assistance technique aux ONGs pour ex?cuter des micro-projets dans les services environnementaux	<del>4.C.1.1</del> Micro-projet pilote effectu? dans une municipalit? <i>Tunis</i>	6/96	MEAT, MI
		<del>4.C.1.2</del> Micro-projets pilotes effectu?s dans cinq autres municipalit?s	1/98	MEAT, MI
		<del>4.C.1.3</del> Projet pilote de collecte s?lective des d?chets m?nagers exp?riment? dans un quartier de Tunis	6/96	MEAT, MI

**PROGRAMME TRIENNAL D'ACTIVITES DU PACT : 1996-1997-1998**

(Programme approuvé le 16/7/96 par le Comité de Coordination du HG-V)

Référence PACT	PERIODE Activités
	<b>B. OCTOBRE 1996 - SEPTEMBRE 1997 (Suite)</b>
<del>1.F.IV</del> X	9. Assistance technique ? l'organisme concerné pour terminer la préparation d'un contrat type de sous-traitance de l'exploitation d'une d?charge contrôlée et vérification des procédures d'octroi du marché
<del>1.F.IV</del> X	10. Assistance technique ? l'ONAS pour l'évaluation des projets pilotes en matière d'assainissement des eaux usées
	11. 4 <sup>me</sup> revue annuelle du PPES/S?minaire sur l'impact du programme HG-V
	<b>C. OCTOBRE 1997 - SEPTEMBRE 1998</b>
<del>1.F.VII</del> 0	1. Assistance Technique pour la sous-traitance au secteur privé de l'exploitation de la d?charge contrôlée de Sousse ✓
<del>1.F.IXc</del> 0	2. Assistance technique aux Ministres de l'Environnement et de l'Intérieur pour vérifier la faisabilité, établir les clauses spécifiques, analyser les offres et établir le contrat final pour la concession d'une station de compostage
<del>1.F.IXb</del> 0	3. Assistance technique aux Ministres de l'Environnement et de l'Intérieur pour évaluer le projet pilote en sous-traitance de l'exploitation d'une d?charge contrôlée
<del>1.C.VI</del> 0	4. Assistance technique ? l'organisme concerné pour la préparation d'un contrat type de concession d'une d?charge contrôlée et vérification des procédures d'octroi du marché
<del>1.F.III</del> 0	5. Assistance technique ? l'ONAS pour établir les clauses spécifiques, analyser les offres et établir le contrat final pour la concession d'une station d'égout ✓
4.A.I	6. Assistance aux ONGs nationales concernées par l'environnement pour des actions de sensibilisation des citoyens aux questions environnementales
4.B.I	7. Financement de l'organisation de conférences tunisiennes avec la participation de dirigeants d'ONGs américains concernés par l'environnement
<del>1.F.IV</del> X	8. Assistance technique aux organismes concernés pour l'analyse des moyens d'augmenter l'accès au financement pour les sociétés privées qui se lancent dans le domaine des services environnementaux
<del>1.D.III</del> 0	9. Assistance technique pour l'élaboration d'une stratégie de communication sur la participation du secteur privé dans les secteurs de l'assainissement et des déchets solides
<del>3.B.III</del> 0	10. Assistance technique aux organismes concernés pour rédiger un guide de conception pour systèmes d'assainissement non-conventionnels ( technologies adaptées aux petites municipalités)
<del>3.C.III</del> 0	11. Assistance technique aux organismes concernés pour continuer le développement des technologies rattachées aux ordures ménagères (collecte, d?charge contrôlée...) et rédiger un guide de conception
<del>3.D.III</del> 0	12. Etude sur le rôle potentiel des partenariats dans la réhabilitation des réseaux de base et du bâti dans le tissu ancien

## PROGRAMME TRIENNAL D'ACTIVITES DU PACT : 1996-1997-1998

(Programme approuvé le 16/7/96 par le Comité de Coordination du HG-V)

21-May-97

Référence PACT	PERIODE Activités
	<b>A. OCTOBRE 1995 - SEPTEMBRE 1996</b>
2.IV +	1. Assistance technique à l'organisme concerné pour terminer la préparation d'un contrat-type de sous-traitance de la collecte des ordures ménagères et vérification des procédures d'octroi du marché
3.IV +	2. Assistance technique à l'ONAS pour étudier la faisabilité de la concession d'une station d'épuration et/ou d'une CET
3.XIb	3. Assistance technique à la Municipalité de Sousse pour l'organisation d'une concertation avec les propriétaires des terrains pour le lancement de l'opération de partenariat à El Matar
3.IV +	4. Etablir une stratégie de participation des ONGs dans les activités environnementales
3.VI +	5. Etude de faisabilité des villes non prises en charge par l'ONAS
	6. 3 <sup>ème</sup> revue annuelle du PPES
3.III X	7. Assistance technique aux organismes concernés pour la création et le lancement de nouveaux instruments financiers
3.XIa X	8. Assistance technique au MI et au MEH pour la préparation et l'exécution du projet pilote d'El Matar a. Assistance Technique et Conseil en aménagement foncier et financement d'infrastructures (SKanoun) b. Etude des circuits de recouvrement des coûts c. Modalités d'application de la stratégie foncière
	<b>B. OCTOBRE 1996 - SEPTEMBRE 1997</b>
3.IV X	1. Assistance technique aux Ministères de l'Environnement et de l'Intérieur pour évaluer le projet pilote de sous-traitance de la collecte des ordures ménagères
3.VI +	2. Assistance technique et formation aux organismes concernés pour créer l'Unité de Contrôle de Performance de gestion des déchets solides
3.VI E (2) +	3. Assistance technique aux organismes concernés pour renforcer la capacité de confier l'exploitation des déchets contrôlés au secteur privé/Stages de formation
3.IV X	4. Etude sur le recouvrement des coûts en matière de déchets solides
3.IV X	5. Assistance technique aux organismes concernés pour l'analyse (coûts/avantages, faisabilité administrative, impact fiscal) des options pour recourir aux marchés tunisiens et étrangers
3.I	6. Assistance technique aux organismes concernés pour effectuer un montage institutionnel (Assistance technique à l'Unité "Déchets Solides" de l'ANPE)
3.XIa X	7. Assistance technique au MI et au MEH pour la préparation et l'exécution du projet pilote d'El Matar a. Assistance Technique et Conseil en aménagement foncier et financement d'infrastructures (SKanoun) b. Assistance technique à l'organisme concerné pour la préparation d'un contrat type de partenariat municipalité/prom. privé pour l'aménagement foncier et vérification des procédures d'octroi du marché c. Assistance technique à la Municipalité de Sousse pour la préparation d'un plan de communication et de sensibilisation pour la mise en oeuvre du projet El Matar
3.VII X	
3.XId 0	
3.IV +	8. Assistance technique à l'ONAS pour la préparation d'un contrat-type de concession d'une station d'épuration et/ou CET et vérification des procédures d'octroi du marché

BEST AVAILABLE COPY

**ANNEX B**

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**LIST OF PERSONS INTERVIEWED**

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**ANNEX B**  
**LIST OF PERSONS INTERVIEWED**

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**Ministère du Développement Economique**

Chadli Aissa                      Directeur Général de l'Infrastructure  
Mokhtar Hammami            Directeur Adjoint de l'Infrastructure

**Ministère de l'Environnement et de l'Aménagement du Territoire**

Fayez Ayed                      Chef de Cabinet  
Mounir Ferchichi              Directeur Etudes et Projets, ANPE  
Ameur Jeridi                    Relations ONG  
Farid Sakly                      Directeur Régional de l'Environnement, Ariana  
Younès Elloumi                Directeur, Département Déchets Solides, ANPE  
Lotfi Marouani                 Directeur, CITET

**ONAS**

Abderrahman Gannoun      Président Directeur Général  
Habib HadjAli                 Chef, Département Développement  
Nejib Abid                      Directeur du Développement

**Municipalité de Sousse**

Lamjed Ammar                Directeur de l'Environnement

**Ministère de l'Intérieur**

Salah Boussatâa              Directeur Général des Collectivités Publiques Locales  
Adel Guettat                  Sous-Directeur de l'Environnement, DGCPL  
Hédi Zakhama                 Directeur des Finances Locales, DGCPL  
Samir Châaba                 Directeur des Etudes, CPSCL  
Mohamed Zeydi                Directeur des Finances, CPSCL

**USAID/RHUDO**

Scott Dobberstein            Directeur Régional par intérim  
Fathi Kraiem                  Conseiller, Responsable du PPES  
Fadhel Ghariani              Conseiller en Assainissement Liquide  
Mounir Majdoub              Conseiller en Aménagement Foncier  
Paul des Rosiers              Global Bureau/USAID/Washington  
David L. Painter                Global Bureau/USAID/Washington

**Ministère de l'Équipement et de l'Habitat**

Fathi Mansouri                Directeur des Programmes, ARRU

**Autres**

Christian Echaroux

Directeur de la Société Méditerranéenne pour l'Environnement  
"SOMEDEN"

Michael Lippe

Consultant, ICMA

Samir Kanoun

Consultant

ANNEX C

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**LIST OF REPORTS CONSULTED**

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**ANNEX C**  
**LIST OF REPORTS CONSULTED**

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- PADCO/EICO/SMART, Etude sur la stratégie nationale de participation du secteur privé dans le domaine de l'assainissement liquide en Tunisie (Rapport définitif); Avril 1996.
- RTI/SMART, Eléments de stratégie nationale pour la participation du secteur privé à la gestion des déchets solides (Rapport définitif); Octobre 1995.
- RTI/ SMART, Participation du secteur privé au projet de décharge contrôlée de Sousse: Etude de faisabilité (rapport définitif); Avril 1996.
- PADCO/EICO, Etude de faisabilité pour la participation du secteur privé dans le domaine de l'assainissement liquide dans les municipalités non prises en charge par l'ONAS, Présentation et choix des villes pilotes; Novembre 1995.
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- PADCO/SIDES, Etude sur l'unité de contrôle de performance à l'ONAS (version définitive); 31 Décembre 1995.
- PADCO/EICO, Etude de faisabilité de l'exploitation par une entreprise privée du réseau d'assainissement de la zone pilote d'El Menzah (version définitive); 9 Août 1995.
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- USAID, Projet pilote d'aménagement foncier: Rapport de présentation du projet El Matar, Juillet 1995.
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- Ministère du développement économique: compte rendu des réunions du comité d'exécution du projet HG005.

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PPES, Etat d'avancement du projet pilote El Matar; Mai 1996.

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PADCO/EICO/SMART. Etude de faisabilité de la concession d'une station d'épuration. Janvier, 1997.

RTI/SMART. Evaluation de 4 projets pilotes de sous-traitance de la collecte des déchets solides. Mai 1997.

RTI/SMART. Etude sur le recouvrement des coûts de la gestion des déchets solides. Avril, 1997.

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PADCO. Contrat-type de sous traitance des travaux d'exploitation des réseaux d'assainissement. Février, 1995.

Chemonics. Impact Study for the El Menzah Sewer Network Pilot Project. May, 1997. DRAFT.

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PADCO/EICO. Etude de faisabilité de l'exploitation par une entreprise privée des ouvrages d'assainissement de cinq communes non prises en charge par l'ONAS. Mars 1997.

USAID/HG-005/PPES: Termes de référence de l'étude de faisabilité d'un système de financement des infrastructure urbaines

**ANNEX D**

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**AUDIT REPORT ON THE ALLOWABILITY OF PROGRAM SPENDING**

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**ANNEX D**  
**AUDIT REPORT ON THE ALLOWABILITY**  
**OF PROGRAM SPENDING**

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**Vérification de l'éligibilité des dépenses 1996-1997**

**A. Introduction**

Le programme de participation du secteur privé dans les services environnementaux (PPES) a apporté un soutien financier sous forme de prêts garantis de l'habitat (HG) aux programmes du gouvernement tunisien destinés à améliorer et à développer les infrastructures environnementales dans les communautés à faibles revenus.

Les critères d'éligibilité des dépenses pour les investissements réalisés en matière d'amélioration et de développement des infrastructures environnementales pour les populations à faible revenus, ont été définis par l'accord de programme de garantie de l'Habitat entre le gouvernement de la République Tunisienne et les États Unis d'Amérique pour le programme de participation de secteur privé dans les services environnementaux, signé le 23 Août 1993. Ces critères sont:

- dépenses effectuées après le 23 Août 1993
- projets non financés par d'autres donateurs
- dépenses destinées à des programmes d'infrastructure urbaine en liaison avec l'habitat
- dépenses bénéficiant aux ménages dont le revenu est inférieur ou égal au revenu urbain médian

L'accord de programme prévoit dans sa section 6.05 que tous les investissements réalisés dans le cadre de cet accord soient effectués conformément aux procédures d'évaluation environnementale en vigueur en Tunisie.

Les quarts programmes suivant, ont été retenus par la République Tunisienne pour un financement HG 005:

- Le Programme National de Réhabilitation des Quartiers Populaires (PNRQP)
- Le Programme National d'Assainissement des Quartiers Populaires (PNAQP)
- Le Programme des Parcelles Assainies
- Le Programme de Développement Urbain Intégré (PDUI)

**B. Vérification de l'éligibilité des dépenses pour l'année 1996/1997**

**B1. Le Programme National d'Assainissement des Quartiers Populaires**

*Rappel:*

En Février 1989, Le Gouvernement Tunisien a lancé le premier projet spécial d'assainissement portant sur l'équipement de 72 quartiers populaires en infrastructures

d'assainissement des eaux usées domestiques. Une tranche complémentaire portant sur 8 autres quartiers populaires a bénéficié de ce programme.

L'impact positif du branchement aux réseaux d'égout de plus de 20,000 ménages habitant les 80 quartiers bénéficiant du programme spécial, sur le plan amélioration des conditions de vie des populations à bas revenus, et sur le plan protection de l'environnement a incité les autorités tunisiennes à poursuivre ce type de programme d'amélioration des conditions sanitaires dans les quartiers populaires.

Dans ce cadre, l'ONAS a mené une étude de faisabilité sur l'assainissement des quartiers populaires, qui a permis d'identifier 300 quartiers ayant un niveau social assez bas et qui sont dans un mauvais état sanitaire.

Les enquêtes détaillées menées sur ces 300 quartiers ont permis de retenir 216 quartiers pour un programme d'assainissement: le deuxième projet d'assainissement des quartiers populaires (PNAQP)

Le 2ème projet d'assainissement des quartiers populaires, qui porte sur 216 quartiers, a été lancé, par l'ONAS, en 1992.

Ce projet d'assainissement de quartiers populaires comprend deux tranches:

- La 1ère tranche porte sur 134 quartiers et comprend 2 phases:
  - la 1ère phase porte sur 42 quartiers avec le raccordement aux réseaux de 8,162 logements
  - la 2ème phase porte sur 92 quartiers avec le raccordement de 18,000 logements
- la 2ème tranche porte sur 82 quartiers avec le raccordement de 22,874 logements

Le coût total de ce projet a été estimé à 35 millions de dinars. L'exécution de ce projet a été assurée par l'ONAS.

Dans le cadre de l'exécution de l'accord de programme de garantie de l'habitat entre le Gouvernement de la République Tunisienne et les États Unis d'Amérique pour le Programme de Participation du Secteur Privé dans les Services Environnementaux (PPES), signé le 23 Août 1993, les dépenses pour la période 1993-1994 présentées pour une éligibilité pour le HG 005 au titre du PNAQP ont été des 7,591 millions de dinars repartis en 3,445 millions de dinars pour la fourniture des conduites et 4,146 millions de dinars pour les travaux.

Pour la période 1994-1995, de Juin 1994 au 31 Mai 1995, l'ONAS a proposé, pour une éligibilité du HG 005, la somme de 6,475 millions de dinars (287 955 dinars pour les fournitures et 6 187 527 dinars pour les travaux).

Pour la période 1995-1996, de Juin 1995 à Mai 1996, l'ONAS a proposé pour une éligibilité du HG005, la somme de 8,617 millions de dinars décomposés en 4,650 pour les travaux et 3,967 pour les fournitures.

Pour la période 1996-1997, de Juin 1996 à Mai 1997, les dépenses présentées pour une éligibilité du HG005 sont de 3,493 millions de dinars décomposés comme suit:

Élément du PNAQP	Dépenses travaux (1)	Dépenses fournitures (1)	Total (1)
1ère tranche - 1ère phase	0,021	-	0,021
1ère tranche - 2ème phase	0,541	0,024	0,565
2ème tranche	2,746	0,161	2,907
Total	3,308	0,185	3,493

(1) en million de dinars

Les détails de ces dépenses par quartier populaire et par nature sont présentés à l'annexe D-I. La vérification de la conformité de ces dépenses aux critères d'éligibilité est présentée dans le tableau suivant.

Critère	Résultat de la vérification
Dépenses effectuées après le 23 Avril 1993	conformes
Activités non financées par d'autres donateurs	conformes
Dépenses destinées à des programmes d'infrastructure urbaine en liaison avec l'habitat	conformes
Dépenses bénéficiant aux ménages dont le revenu est inférieur ou égal au revenu urbain médian	conformes au niveau de l'échantillon visité (1)

(1) L'échantillon a porté sur les quartiers mentionnés dans le paragraphe intitulé "Vérification sur le terrain".

**Conclusion:** Sur les 3,493 MD de dépenses présentées, 3 MD seulement sont éligibles

## B2. Le Programme National de Réhabilitation des Quartiers Populaires

Le Programme National de Réhabilitation des Quartiers Populaires (PNRQP) est un programme d'amélioration des conditions d'habitat dans 223 quartiers populaires repartis sur 136 communes tunisiennes.

Initié dans le cadre du VIIIème Plan de Développement, le PNRQP comprend deux tranches:

- la 1ère tranche dont le coût est estimée à 32 millions de dinars ( MD ) porte sur 108 quartiers
- la 2ème tranche dont le coût est estimé à 18,5 MD porte sur 115 quartiers

La première tranche comprend 2 phases:

- la première phase porte sur 40 quartiers et son coût est estimé à 20,158 MD
- la deuxième phase porte sur 68 quartiers et son coût est estimé à 12,694 MD

La deuxième tranche comprend 3 phases:

- la première phase porte sur 38 quartiers et son coût est estimé à 8,390 MD
- la deuxième phase porte sur 37 quartiers et son coût est estimé à 4,583 MD
- la troisième phase porte sur 40 quartiers pour un coût estimé à 4,736 MD

L'Agence de Réhabilitation et de Rénovation Urbaine (ARRU) est chargée de la réalisation de ce programme. Elle agit comme maître d'ouvrage délégué des communes.

Dans le cadre de l'exécution de l'accord de programme de garantie de l'habitat entre le Gouvernement de la République Tunisienne et les États Unis d'Amérique pour le Programme de Participation du Secteur Privé dans les Services Environnementaux (PPES), signé le 23 Août 1993, les dépenses pour la période 1993-1994 présentées pour une éligibilité pour le HG005 au titre du PNRQP ont été de 5,311 MD repartis en 4,941 MD pour la première phase et 0,370 MD pour la deuxième phase.

Pour la période 1994/1995 (de Juin 1994 au 31 Mai 1995) le Gouvernement de la République Tunisienne a proposé pour une éligibilité du HG005 la somme de 22,318 MD dépensée au titre du PNRQP comme suit:

8,363 MD pour la 1ère tranche, 1ère phase  
13,955 MD pour la 1ère tranche, 2ème phase

Pour la période 1995/1996 (de Juin 1995 au 30 Avril 1996) le Gouvernement de la République Tunisienne a proposé pour une éligibilité du HG005 la somme de 7,961 MD dépensés au titre du PNRQP.

Pour la période 1996/1997 (d'Avril 1996 à Mars 1997) les dépenses présentées pour l'éligibilité du HG005 sont de 8,003 millions de dinars décomposées en:

1,452 MD pour la 1ère phase de la 1ère tranche du PNRQP  
1,387 MD pour la 2ème phase de la 1ère tranche du PNRQP  
2,678 MD pour la 1ère phase de la 2ème tranche du PNRQP  
1,670 MD pour la 2ème phase de la 2ème tranche du PNRQP  
0,816 MD pour la 3ème phase de la 2ème tranche du PNRQP

Les détails de ces dépenses par quartier sont présentés à l'annexe D-II.

La vérification de la conformité de ces dépenses aux critères d'éligibilité est présentée dans le tableau suivant.

Critère	Résultat de la vérification
Dépenses effectuées après le 23 Avril 1993	conformes
Activités non financées par d'autre donateurs	conformes
Dépenses destinées à des programmes d'infrastructure urbaine en liaison avec l'habitat	conformes
Dépenses bénéficiant aux ménages dont le revenu est inférieur ou égal au revenu urbain médian	conformes au niveau de l'échantillon visité (1)

(1) L'échantillon a porté sur les quartiers mentionnés dans le paragraphe intitulé "Vérification sur le terrain".

**Conclusion:** Les 8,003 MD de dépenses présentées sont éligibles

SB

### **B3. Le Plan de Développement Urbain Intégré (PDUI)**

Le PDUI est un programme d'amélioration des conditions de vie dans les milieux urbains à bas revenus.

Ce programme comporte en général:

- des actions visant l'impulsion d'une dynamique économique dans le quartier d'intervention
- le renforcement des équipements socio-collectifs visant l'amélioration des conditions de vie dans le quartier
- l'amélioration du niveau d'équipement en infrastructures de base (assainissement, voirie, éclairage public)

En Mai 1997, 11 projets sont en cours de mise en oeuvre.

Ces quartiers lancés en 1994 dans le cadre de la 2ème tranche du PDUI sont:

El Khadra à Sidi Bouzid  
Mechta; Nesma à El Fahs  
Essourour à Sbeitla  
Essourour à Gafsa  
El Amel à Mélaoui  
Farhat Hached à Mednine  
Dabdaba à El Hamma  
Zahoua et Azaïez à Jendouba  
Essalah - Ennour à Siliana  
Maâgoula à Béjà  
Taieb M'hiri au Kef

Dans le cadre de l'exécution de l'accord de programme de garantie de l'habitat entre le Gouvernement de la République Tunisienne et les États Unis d'Amérique pour le Programme de Participation du Secteur Privé dans les Services Environnementaux (PPES), le Gouvernement de la République Tunisienne a proposé pour une éligibilité HG-V, pour la période 1994-1995, la somme de 1,107 Million de dinars dépensées au titre du PDUI pour les infrastructures urbaines et pour la période 1995-1996 la somme de 1,993 millions de dinars.

Pour la période 1996-1997, les dépenses proposées pour une éligibilité HG005 sont de 0,774 millions de dinars.

Ces dépenses ont été effectuées dans le cadre de la mise en oeuvre des projets PDUI pour financer la composante infrastructure de base liées à l'habitat:

- assainissement (eaux usées)
- évacuation des eaux pluviales
- voiries
- éclairage public

La vérification de la conformité de ces dépenses effectuées au titre du PDUI en matière d'infrastructures liées à l'habitation aux critères d'éligibilité est présentée dans le tableau suivant.

Critère	Résultat de la vérification
Dépenses effectuées après le 23 Avril 1993	conformes
Activités non financées par d'autres donateurs	conformes
Dépenses destinées à des programmes d'infrastructure urbaine en liaison avec l'habitat	conformes
Dépenses bénéficiant aux ménages dont le revenu est inférieur ou égal au revenu urbain médian	conformes au niveau de l'échantillon visité (1)

(1) L'échantillon a porté sur les quartiers Taieb M'hiri au KEF, Essourour à SBEITLA et Mechta Nesma au FAHS.

**Conclusion:** Les 0,774 MD de dépenses présentées sont éligibles

#### B4. Vérifications sur terrain

La vérification de l'éligibilité des dépenses a été effectuée sur un échantillon de 15 quartiers inscrits sur les listes des projets du PNRQP, du PNAQP et du PDUI préparées respectivement par l'ARRU, l'ONAS et le CGDR.

Le type de programme et l'état global d'avancement des travaux dans ces quartiers sont présentés dans le tableau ci-après.

Quartiers	Type de programme exécuté sur le terrain	État d'avancement des travaux
Zaghouan - Ras El Aïn	PNAQP	en cours d'achèvement
Bouficha-cités 20 Mars, 1er Juin et Hached	PNAQP- PNRQP	en cours
El Fahs - Mechta - Nesma	PDUI PNRQP	les travaux d'infrastructures n'ont pas encore démarré achevés
Bizerte - Borj Gommez	PNAQP	achevés
Menzel Abderrahmen Taffala	PNAQP	achevés
Menzel Jmil - Bir R'mal	PNAQP	en cours d'achèvement
Tinja - Cité Mohamed Ali	PNRQP	achevés
Le Kef - Asfouria	PNAQP-PNRQP	achevés
Le Kef - Bir Ethelj	PNAQP-PNRQP	achevés
Teboursek - Ennasim 1 et 2	PNRQP	achevés
Tajerouine - Aïn Labiar	PNRQP	achevés
Sers - Ennasim	PNRQP	en cours d'achèvement
Le Kef - Taieb M'hiri	PDUI	en cours
Sbeitla - Essourour	PDUI	les travaux d'infrastructures viennent de démarrer

Les quartiers visités présentent, dans leur ensemble, les caractéristiques suivantes:

- Ils sont habités par une population à faibles revenus à l'exception du cas de Zaghouan
- Les logements sont du type populaire à l'exception du quartier de Zaghouan.
- Les infrastructures de base ont été introduites dans le cadres de programmes spéciaux (PNAQP, PNRQP en particulier)

- Les revenus des ménages sont en grande majorité inférieurs à 300 dinars/mois sauf pour le quartier de Zaghouan
- Rares sont les cas où le logement est d'un niveau supérieur. Dans ces cas leurs propriétaires sont généralement les propriétaires du terrain accueillant le quartier

Pour les rares logements "haut standing", situés dans les quartiers visités, les revenus des ménages sont supérieurs au revenu urbain médian. Ces habitations ne peuvent être extraites physiquement des projets de réhabilitation ou d'amélioration du niveau des infrastructures. Ces logements représentent entre 5 et 10% du parc logement constituant les quartiers.

Pour le quartier Ras El Ain à Zaghouan le projet a englobé de nombreux logements de "haut standing" situés en amont du quartier et représentant plus de 50% du parc logement du quartier.

Les types d'infrastructures fournies par les projets dans ces quartiers sont indiqués dans le tableau ci-après.

Quartiers	Infrastructures urbaines fournies par le projet
Zaghouan - Ras El Ain	Assainissement
Bouficha, 20 Mars et 1er Juin	Assainissement et voirie
Bouficha - Hached	Assainissement et voirie
El Fahs - Mechta - Nesma	Assainissement, voirie et éclairage public
Bizerte - Borj Gommez	Assainissement
Menzel Abderrahmen Taffala	Assainissement
Menzel Jmil - Bir R'mal	Assainissement et voirie
Tinja - Cité Mohamed Ali	Assainissement et voirie
Le Kef - Asfouria	Assainissement et voirie
Le Kef - Bir Ethelj	Assainissement et voirie
Teboursk - Ennasim 1 et 2	Assainissement et voirie
Tajerouine - Ain Labiar	Assainissement et voirie
Sers - Ennasim	Voirie
Le Kef - Taieb M'hiri	Assainissement
Sbeitla - Essourour	Assainissement

Toutes les personnes interviewées, dans ces quartiers, ont déclaré que les projets qui ont touché leurs quartiers ont amélioré considérablement leur cadre de vie et plus particulièrement à travers la pose des réseaux d'assainissement et l'aménagement de la voirie.

### C. Conclusions

Sur la base des informations collectées auprès des opérateurs chargés de l'exécution du PNAQP, du PNRQP et du PDUI et des visites effectuées sur le terrain, nous pouvons conclure que les dépenses engagées entre Mai 1996 et Avril 1997 pour la réalisation des travaux d'infrastructure des quartiers urbains listés dans les annexes I et II et dans le paragraphe se rapportant au PDUI, 11,779 MD sont éligibles.

Les 4 critères d'éligibilité sont respectés dans plus de 90% de ces quartiers où les revenus mensuels moyens sont inférieurs au revenu urbain médian.

Le montant total des investissements proposés est de 12,272 million de dinars. Toutes ces dépenses ont été réalisées entre Mai 1996 et Avril 1997 et ne sont pas financées par d'autres bailleurs de fonds étrangers.

**Le montant total de ces dépenses dépasse l'équivalent de 10 millions de dollars des Etats Unis d'Amérique**

Le tableau ci-après résume les types des investissements dépensés par le Gouvernement de la République Tunisienne destinées à des programmes d'infrastructure urbaine en liaison avec l'habitat de Mai 1996 à Avril 1997.

Activités	Dépenses en million de dinars	Éligibilité
P.N.A.Q.P	3.493	3 MD éligible
P.N.R.Q.P	8.003	éligible
P.D.U.I	0.776	éligible
Total	12.272	total éligible 11.779 MD

**ANNEXE D-I**  
**PROGRAMME DE GARANTIE DE L'HABITAT (HG 005/USAID)**

**2ème Projet d'assainissement des quartiers populaires**  
**Liste des dépenses effectuées durant la période Juin 96-Mai 97**  
**(en dinars)**

**1ère tranche-1ère phase**

Ville	Quartier	Coût des travaux	Total des dépenses effectuées de Août 93 à Mai 97	Dépenses effectuées de juin 96 à Mai 1997
Hrairia Ouardia	Sonia/ Hammami/Belkahla Ennour	197.508	70.788	-
Ettadhamen	Bejaoua 1&2 Annasr	109.804	59.975	-
Ben Aous Mornag	Ennacim 1&2 Essaâda	200.000	156.218	-
Nabeul Soliman Haouaria	Essaâda 1 & 2 Essoughi Echbeeb	234.796	284.796	-
Zriba Nadhour	Essalem Cité du Stade	250.007	201.761	-
Ras Jebal Ghar El Melh	Bir Zaârour Avenue Habib Bourguiba	268.558	184.349	-
Béja Mejez El Bab Testour	M'zara, Borm Olia Medina Bahrine Boukhoura (Centre Ville)	346.932	256.597	-
Jendouba Ghardimaou	Ennakhil 2 Ezzouhour	235.396	34.728	-
Siliana	Mongi Slim	100.129	27.383	-
Kairouan	Borgi I	207.000	129.353	-
Kasserine Mejel Bel Abb. Sbeitla	Ennahdha II et El Khadhra Centre Ville Forêts	797.000	797.268	20.803
Sousse M'saken Messaâdine H. Sousse Kalâa Kébira Sidi Bou Ali	Oued Chnim) Ennour) Menchia) Oued El Ksiba Fadden Aoun Ben Ammar	864.000	285.125	-
Ksar Hellal Sahline Khnis	Sidi Lasmar Sidi Nasr Centre Ville	563.000	632.104	-
Sfax Sakiet Eddaier	Zanket El Hjar et El Fekih Ben Slima	105.954	-	-
Gafsa Ksar	Guitna (pose + Eq.)	378.000	434.329	-

Ville	Quartier	Coût des travaux	Total des dépenses effectuées de Août 93 à Mai 97	Dépenses effectuées de juin 96 à Mai 1997
Tozeur Deguèche	Ras Edrâa Essouk (1ère et 2ème tr)	108.886	11.676	-
Tataouine TF et TC Medenine	Ennour et Oued El Gamh Gammoudi Charef	531.028	372.195	-
<b>Total 1ère Tranche</b>		<b>5.497.998</b>	<b>3.938.645</b>	<b>20.803</b>

**2ème Projet d'assainissement des quartiers populaires**  
**Liste des dépenses effectuées durant la période Juin 96-Mai 97**  
**(en dinars)**

**1ère tranche-2ème phase**

Ville	Quartier	Coût des travaux	Total des dépenses effectuées de Août 93 à Mai 97	Dépenses effectuées de Juin 96 à Mai 1997
Tunis/ Hrairia	Mansoura II, Bouzaiene et Othmania	200.387	284.387	-
Bardo	Cité Militaire			
Ariana	Mansoura I&II	311.000	371.155	26.572
	Santé et Ezzahani	126.912	161.912	-
Ettadhamen	2 Mars et 18 Janvier 1 et 2	803.881	1.061.796	-
	Avenue 7 Novembre	340.185	455.185	-
	Douar Hicher (essalama) (Arhh Tijani)	155.143	223.143	-
	El Frachiche et Lycée	352.000	451.730	-
	El Houda	56.792	86.792	-
Zarzouna	Nouvelle Cité et Nabli 2	56.000	68.776	4.788
Nabeul	Borj Bou Khlifa Mrazgui Ezzayatine	258.825	341.825	-
Fondok Jedid				
Kef	Asfouria Bir Thelj	151.579	196.577	-
Gaâfour	Lycée	172.313	250.313	-
Sfax	Badrani	141.890	199.171	-
Kébili	Yakoub et Centre Ville Omar Ibn El Khattab	464.000	570.618	
Metouia	Metouia	286.000	433.252	-

64

Ville	Quartier	Coût des travaux	Total des dépenses effectuées de Août 93 à Mai 97	Dépenses effectuées de Juin 96 à Mai 1997
Tunis/ Ouardia	Cité Bouladhem Cité Ouelfet Houita Cité Mohamed Ali	93.215	125.212	8.429
Marsa	Tabeuk-Slama	204.000	216.465	6.957
	Harrouche 1 et 2	296.246	367.052	17.674
Ariana	El Amal	88.545	122.545	7.568
	Gâaloul	31.531	80.671	-
	Cité la Mosquée	70.899		
	Cité Mâazia Cité El Malaab		89.897	-
Mornag et Borj Cedria	Sidi Saâd SNIT	221.000	325.379	53.565
Dar Chaâbane	Sidi Abdallah	60.473	91.473	-
H. Leghzez Kélibia Ml. Temime Haouaria	El Angar Hwach Rmal El Khadra	181.000	234.379	22.293
Ras Jebal	Bir Chraiet Hofret Hamza Route de Tunis	151.827	273.827	13.802
Tinja	Mohamed Ali Ammama Ezzouhour Kharaiet Elabben	274.000	440.824	25.628
Nefza	Ezzouhour	47.692	78.692	4.424
Ain Drahem	2 Mars-Ezdihar	210.621	298.621	19.951
Jendouba	Bourchadette I et II	157.972	232.972	17.326
Sers	Ennacim	189.968	277.968	-
Bou Hajja	Indépendance	60.000	-	-
El Ala	Cité Populaire	110.000	145.375	-
Kasserine Feriana Téla	Ezzouhour Ouest Hwach	378.000 557.000	72.656	52.421
	Ennajarine		720.743	47.500
Sousse Enfidha	Laouinet Erriadh - Med Ali	334.000	512.457	29.456
Bouficha	Hached	70.000	-	-
Sousse Akouda	Boukhzar El Makbara Batr El Karma	196.714	299.707	16.813
Monastir	Ennahdha	34.524	66.524	2.952
Moknine + Jammel Zeramdine	Essouassi + Liberté Cité Populaire et Essouaki	229.484	361.482	19.614
Moknine	Ezzamrine	90.000	132.586	-
Ksibet Mediouni	Chaker et Karkar	246.741	346.741	21.089
Bennane	République Est El Menchia	252.043	360.043	21.813
Mahdia	Kaouech Dar Echikh	268.000	349.428	22.857

65

Ville	Quartier	Coût des travaux	Total des dépenses effectuées de Août 93 à Mai 97	Dépenses effectuées de Juin 96 à Mai 1997
El Jem	Rue 18 Janvier	297.000	382.097	-
Ksour Essef	Jnane Sidi Taher			
Gafsa	Cité des Jeunes et Bab Rmal	664.000	785.012	-
Oum Laraies	Kousseila Est	148.000	188.012	-
Houmet Souk	Jouamaâ	42.826	56.826	-
Nefta	Guettaya	159.000	210.687	37.155
Mi. Bouzelfa	Ellouz et Garbouj	90.000	116.463	-
Mi. Abderrahmen	Oued Jefli	22.000	27.035	1.883
Enfidha	Attahrir	280.000	422.331	33.663
<b>TOTAL 1ère Tranche-2ème Phase</b>		<b>10.959.367</b>	<b>14.801.953</b>	<b>566.239</b>

**2ème Projet d'assainissement des quartiers populaires**  
**Liste des dépenses effectuées durant la période Juin 96-Mai 97**  
**(en dinars tunisien)**

**2ème tranche**

Ville	Quartier	Coût des travaux	Total des dépenses effectuées de Août 93 à Mai 97	Dépenses effectuées de Juin 96 à Mai 1997
Bizerte-Ras Jebel	Borj Gommez-Taffala-Jebal Essouassi-Dar Dammous	139.000	199.417	28.404
Menzel Jemil	Bir R'mal	90.000	110.217	48.230
Ariana	Sidi Soufiane Darouiche et La Mosquée	314.000	384.267	75.429
Mannouba	Essaida Mannoubia	45.000	70.112	-
Tazarka-Beni Khiair - Korba	Najah Nozga Ennacim Charle Nicole	263.000	320.872	9.564
Azmour-MI Temime	Beni Malek et Louatia	134.000	204.809	48.206
Mornag	Bir Ezzangua	95.000	125.450	85.450
Beni Hassen	Ennouhoudh	136.000	236.927	10.662
Ksar Hellal(EQ)	Cité Helal	123.000	197.154 90.480	22.237 29.794
Sayada Lamta	Cité Nouvelle Bir El Aveb	220.000	178.456	101.456
Sahline	Cité Nouvelle	80.000	103.707	49.707
Bekalta Ouardanine Téboulba	Ragouba Divers Rues Ayacha	170.000	146.841	65.841
Bouficha	1er Juin - 20 Mars - Hached	308.000	433.626	77.649
Mahdia  Ksour Essef El Jem	Raoudha Tahar Sfar Zghana Hached Mohamed V	611.000	712.831	490.365
Le Kef	Dahmani	83.000	110.724	-

Ville	Quartier	Coût des travaux	Total des dépenses effectuées de Août 93 à Mai 97	Dépenses effectuées de Juin 96 à Mai 1997
Bousalem	Cité Hached	256.000	346.710	53.997
Chichia	Ennasr	85.000	102.508	-
H. Souk	Boumallel	209.000	278.760	49.479
Tozeur	Ennahdha	101.000	141.579	-
Kairouan	Cité Borj II et Oued Manaa	160.000	266.973	145.973
Bouhajla	Raoudha et Indépendance	103.000	126.262	94.262
Sbiba	Essalama	275.000	321.547	179.547
Nefza	Barid et Ennasr	86.000	113.702	77.702
La Goulette	Ben Brik Ain Zaghouan	46.000	22.000	-
Ariana	Dar Fadhel 1 et 2	318.000	227.777	75.777
	Ennacim et Ardh Béji	373.000	390.225	230.225
Oued Ellil	- El Kobbâa - Ennasr	420.000	273.602	165.602
	- Sanhaja	250.000	120.000	-
Ettadhamen	Ali Zouaoui - Drin	160.000	174.972	144.972
Ml.Abderrahmen	Jebal Essouassi	12.000	6.000	-
Somaâ Dar Chaâbane El Fehri	Chafrada - Bouksir - Nozha	272.000	80.000	-
Ghardimaou	Cité Rajaa	210.000	261.756	191.756
	Kalaât Amara	40.000	18.000	-
Oued Mliz	Centre Medina	100.000	40.000	-
	Ayachi	30.000	13.000	-
Tabarka	Kraïa Jnatria	248.000	128.389	48.389
Sidi Bouzid	Cité Brahmia	43.000	68.152	51.152
Kalaâ Kébira	Farhat Hached - Hashasia	230.000	166.000	-
Zaghouan Mahdia	Ain Zaghouan Essalem	260.000	253.961	173.961
Chebba	Jebal Ouaja Abdelwaheb	900.000	449.205	89.205
<b>Total 2ème Tranche</b>		<b>8.007.000</b>	<b>8.016.970</b>	<b>2.915.002</b>
<b>Total 1ère Tranche</b>		<b>16.457.365</b>	<b>18.740.598</b>	<b>587.042</b>
<b>Total Général 1ère Tranche et 2ème Tranche</b>		<b>24.464.365</b>	<b>26.757.568</b>	<b>3.502.044</b>

**ANNEXE D-2**  
**PROGRAMME NATIONAL DE RÉHABILITATION**  
**DES QUARTIERS POPULAIRES**

**Tableau récapitulatif des dépenses effectuées par tranche et par phase (en DT)**

	Dépenses effectuées au 30/04/96	Dépenses effectuées au cours de la période Avril 96-Mars 97
1 ère Phase	16.731.502,130	1.451.688,256
2 ème Phase	10.347.659,980	1.387.287,835
<b>Total 1ère Tranche</b>	<b>27.079.162,110</b>	<b>2.838.976,091</b>
1 ère Phase	4.564.658,603	2.678.256,947
2 ème Phase	2.617.705,125	1669.672,967
3 ème Phase	816.296,191	816.296,182
<b>Total 2ème Tranche</b>	<b>7.998.659,919</b>	<b>5.164.226,096</b>
<b>Total Général</b>	<b>35.077.822,029</b>	<b>8.003.202,187</b>

Source: ARRU, Programme National de Réhabilitation des Quartiers Populaires - Investissements éligibles au financement HG-V -Avril 96-Mars 97.

**P.N.R.Q.P.**  
**1ère tranche 1ère phase (en 1000 DT)**

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96 - Mars 97
Tunis-Hrairia-Soltani	711.	114,031
Tunis-Ennour	280.	34,242
Tunis-Sidi Hcine	2.910.	233,660
Tunis-Intilaka	414.	40,997
Le Bardo-Bortal Hayder	257.	18,641
M.Abderrahman-Oued Roumine	627.	37,258
Mateur-Erraja	864.	50,989
Ettadhamen-El Bassatine	1.351.	216,098
Hammam-Lif-Bellino	202.	94,323
Mhamdia Fouchana-Essada	665.	63,828
El Hammamet-Sidi Bouali	616.	5,397
Fahs-El Mechta	465.	0,000
Teboursouk-Ennasim 1&2	354.	0,000
Sakiet Sidi Youssef-El Kerfeh	150.	14,778
Dahmani-Sidi Dahmani	372.	0,000
Gaafour-Ezzouhour	370.	16,362
Siliana-Taieb Mhiri	300.	0,000
Bargou-El Kadim	284.	0,000
Thala-Ennajarja	333.	1,045
Sbeitla-Essourour	492.	38,444
Sidi Bouzid-Ouled Chalbi	360.	0,000

**P.N.R.Q.P.**  
1ère tranche 1ère phase (en 1000 DT)

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
Redeyef-Maghreb El Arabi	727	78,641
Hammam Sousse-Oued El Ksiba	278	0,000
Sousse-El Matar	314	73,143
Msaken-Ennour	950	0,000
Kalaa Kebira-Fedden Aoun	506	23,831
Ksar Hellal-Sidi Lasmar	340	0,000
Zermdine-Sidi Smail	308	0,000
Chebba-Charguia-Sidi Salem	497	0,000
Sfax-EL OUNS	162	104,078
Djebnina-El Mhajba	246	0,000
Sakiet Ezzit-El Bahloul	258	28,085
Meknassy-Taieb M'Hiri	367	49,785
Kebili-Nozla Jaoufia	349	2,427
Gabes-El Bled	310	40,739
Mednine-Gammoudi Charef	510	1,125
Beni Khedache-Ezzouhour	341	15,681
Zarzis-Saadouna	285	17,017
Tataouine-Oued El Gameh	294	9,454
Mornah-Sidi Saâd	144	42,934
Projets engagés ( 40 quartiers)	19.563	1.451,688
Projets à engagés 0	0.000	0,000
Total ( 40 quartiers )	19.563	1.451,688

**P.N.R.Q.P.**  
1ère tranche 2ème phase (en 1000 DT)

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
La Goulette-El Malja	778	106,775
Carthage-Mohamed Ali	133	62,742
Carthage-Yasmina	114	56,931
Ariana-El Mansoura 1&2	375	74,250
Tebourba-Erriamel	100	8,881
Ezzahra-Borj Louzir	65	5,602
Bizerte-Ennakhla II	359	31,685
El Alia-Ibn Jarrah	58	0,000
Menzel Bourguiba-Mellassine	138	0,000
Menzel Bourguiba-Ethoura	49	0,000
Menzel Bourguiba-Kheireddine	72	0,000
Menzel Jemil-Bir El Kaid	123	0,000
Kasserine-Ezzouhour	259	0,000
Kasserine-El Bassatine	362	20,972
Jedliane-Centre Ville	243	23,347
Gafsa-Assala Est	329	62,295
Sened Ezzitouna	72	15,525
El Guetar-Frères Labidi	173	0,000
El Ksar-Souk Lella	205	86,759
El Metlaoui-Saoufa & Trabelsia	96	2,090
El Metlaoui-Kaima	164	0,660

**P.N.R.Q.P.**  
**1ère tranche 2ème phase**  
**(en 1000 DT)**

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
Om Laraies-Koussaila Ouest	262	2,238
Mdhilla-Cité des Jeunes	174	2,719
Bir El-Hfay-Centre Ville	200	6,270
Kairouan-El Bourgi	266	34,073
Hajeb Layoun-Cité Essaada	159	4,108
El Oueslatia-El Ommel	143	0,000
Ksiba Thrayat-Rahba	204	10,027
Kalaa Seghira-El Jorf	103	5,732
Bouficha-Ezzouhour	166	62,384
Zaouiet Sousse-Logements Populaires	101	3,753
Bembla et Menara-O.P Sahel 1	90	0,616
Ouerdanine-O.P Sahel 2	59	0,637
Bennane-Bodher- El Menchia	95	45,661
Sidi Ameur Hmada	109	0,668
Soliman-El Hadaeik	109	0,517
Bou Argoub-El Horria	355	6,652
Zaouiet Jedidi-Erriadh	124	7,951
Zriba-Essalem	49	2,417
Jemna-Jemna Sud	117	0,470
El Golaa-7 Novembre	101	5,180
Souk El Ahad-Bouabdallah	132	0,470

**P.N.R.Q.P.**  
**1ère tranche 2ème phase (en 1000 DT)**

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
Nabeul-Sidi Amor	279	46,631
Korba-Ettamir 1&2	194	51,423
Kelibia-Lahouach	145	125,460
El Mida-Cité Populaire	191	55,753
Beja-Saniet Jbara	72	21,886
Mejez EL Bab-El Argoub	290	3,623
Testour-26 Février	314	0,000
Jendouba-Ras El Kef	129	19,223
Bou Salem-El Bardaa	113	0,334
Tajerouine-Ain Labiar	234	0,627
Kalaa Khasba-El Mellassine	154	41,300
Bouarada-Erriadh	61	0,000
Bouarada-Ennour	134	0,606
Krib-Essanaoubar	127	0,000
Makthar-Groua	23.	30,560
Rouhia-Essaada	130	19,890
Kesra-J.Romane & Intilaka	138	83,947
Souassi-Cité Populaire	235	5,179
Bradaa-Bradaa Nord	134	0,961
Bir Ali Ben Khelifa-El Ouroud	68	6,634
Skhira-Essaada	72	6,636.

**P.N.R.Q.P.**  
1ère tranche 2ème phase (en 1000 DT)

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
Houmet Souk-Essouani	557	23,929
Ben Guerdane-Kbairia	282	15,847
Ghomrassen-Enssefri	121,5	6,359
Tozeur-Ras Edhraa	182	53,800.
Ksar Hellal-Cité Helal	354	17,751,
Projets engagés 68	12.325,5	1.387,287
Projets à engager 0	0.000	0,000
<b>Total 68</b>	<b>12.325,5</b>	<b>1.387,287.835</b>

**P.N.R.Q.P.**  
2ème tranche 1ère phase (en 1000 DT)

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
Tunis-Jlass	233	149,584
Tunis-Akarma	331	232,192
Tunis-Essalama	435	377,049
Tunis-Nouablia (Rabboudi)	171	105,991
Tunis-Garjouna	127	3,298
Tunis-Sidi Fathallah	299	2,424
Tunis-Houas	529	1,881
Tunis-Kilani-Sfaxi	264	206,842
Ettadhamen-Cité El Bejaoui 1 & 2	196	160,105
Ettadhamen-Cité Essalama	253	25,834
<i>Ettadhamen-Cité El Mourouj 1&amp;2</i>	<i>147.000</i>	<i>1.985,500</i>
Ettadhamen-Ennasr	282	249,002
Nadhour-El Malaab	104	6,385
Dar Chaaben-Essoui 1&2	49	21,560
El Haouaria-Cité Echabeb	182	28,880
Ras Jebel-Bir Zaarour	252	61,970
Beja-M'Zara	111	3,735
Mejez El Bab-El Bahrine	66	13,963
Jendouba-Ennakhil II	191	102,825
Ghardimaou-Ezzouhour-Ennakhil	221	144,498
Siliana-Abben Ext (Ennour)	18	2,275
Siliana-Mongi Slim	168	51,159

**P.N.R.Q.P.**  
2ème tranche 1ère phase (en 1000 DT)

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Mai 95-Avril 96
Siliana-Cité Essalah	60	51,534
Sousse-Sidi Abdelhamid	133	41,234
Sousse-Ksibet Chott	217	43,399
Sousse-Oued Bliben	104	65,944
Sidi Bouali-Sakiet Ben Ammar	85	46,491
Kheniss-Ancienne Ville	183	48,720
Sahline-Sidi Nasr	62	2,142
Kairouan-Ali Bey	252	38,629
Kasserine-Essalem 2	216	0,000
Majel Bel Abbes-Centre-Ville	161	20,810
Sfax-Zanket El Hjar	142	61,919
Sfax-Zanket Fkih	58	33,490
Sakiet Eddaier-Cité Ben Slima	46	13,116
Gabes-Med Ali & Taieb Mhiri	293	131,660
Mednine-Oued El Gharbaoui	410	126,446
Projets engagés 36	6.904	2.677,002
Projets à engager 2	227	1,254
<b>Total 38</b>	<b>7.131</b>	<b>2.678,256</b>

**P.N.R.Q.P.**  
2ème tranche 2ème phase (en 1000 DT)

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
Tunis-Campos Med Ali	95	1.410
Ariana-Zhani	61	14.922
Kalaat El Andalous-Cité des Martyrs	96	70.543
El Haouria-Cité El Khadhra	192	108,806
Bizerte-Hbach	11	10,736
Bizerte-Cité Nouvelle	18	16,816
Bizerte-Sebkha	18	15,630
Ras Kebel-Bir Chraiet	21	0,000
Ras Jebel-Route de Tunis	31	0,000
M.Abderrahman-Oued Jefli	23	16,200
Tinja-El Amama	55	31,932
Tinja-Cité Mohamed Ali	100	45,574
Beja-Ain Brom - Sofla	72	41,149
Beja-Medina (Houmet Jerba)	90	76,997
Nefza-Ezzouhour	38	6,325.
Jendouba-Bourchadette 1&2	42	16,008
Kef-El Asfouria	59	32,167
Kef-Bir Etthelj	44	34,652
Sers-Ennasim	263	20,256
Siliana-EXT M.Slim (ex ABBEN)	33	6,712
Gaafour-Cité du Lycée	144	125,425

**P.N.R.Q.P.**  
**2ème tranche 2ème phase (en 1000 DT)**

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
Bou Hajja-Indépendance	92	37,214
El Ala-Cité Populaire	102	18,070
Feriana-Lahoueche	324	85,348
Sousse-Boukhzar	10.	60,072
Sousse-Laouinet Est	230	122,086
Akouda-El Makbara	111	26,177
Enfidha-Erriadh	69	23,086
Bouficha-Hached	82	0,783
Monastir-El Faouz	124	49,444
Zeramdine-Cité Populaire	85	60,470
Ksibet El Mediouni-Chaker & Karkar	139	63,933
Moknine-Cité Souassi	324	113,798
Mahdia-Kouach Dar Echikh	230	53,750
Ksour-Essaf-Cité Sidi Tahar	250	27,091
Nefta-El Gattaia	387	58,401
Houmet Souk-Jouamaa	26	0,000
Projets engagés 37	4.183	1.674,312
Projets à engager 0	0.000	0,000
<b>Total 37</b>	<b>4.183</b>	<b>1.669,672</b>

**P.N.R.Q.P.**  
**2ème tranche 3ème phase (en 1000 DT)**

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
La Goulette-Ben Brik	44	13,814
La Goulette-Ain Zaghouan	52	3,950
Ariana-Deruiche	94	22,683
Oued Ellil-Cité El Ward	156	70,773
Sidi Thabet-M' barka	88	62,930.
Mannouba-Saida Mannoubia	45	6,720.
Mornag-Bir Ezzangua	79	13,214
El Hammamet-Oued Errommane	84	33,675
El Hammaet-Ennadhour	77	51,542
Grombalia-La Fabrica	87	45,495
Tazarka-Ennajah	66	28,838
Azmour-Azmour EST	68	20,826
Kelibia-Cité du Port	35	28,439
M. Abderrahmen - Taffala	23	8,987
Mejez El Bab-Maxla El Bjaoua	78	8,804
Mejez El Bab-Sidi Raïess	77	44,511
Ghardimaou-Cité Erraja	240	2,633
Bou Salem-Hached	216	5,360
Oued Meliz-Centre Ville	46	25,652
Bou Hajja-Raoudha Populaire	93	3,030
Bouficha-1ER Juin Bouficha	54	7,079

**P.N.R.Q.P.**  
**2ème tranche 3ème phase (en 1000 DT)**

Quartiers	Coût prévisionnel actualisé	Dépenses effectuées de Avril 96-Mars 97
Bouficha-20 Mars Bouficha	87	7,079
Zaouiet Kountech-Ettahrir	77	25,750
Beni Hassen-Ennouhoudh 1 & 2	171	77,787
Mahdia-Erraoudha	201	4,882
Mahdia-Zgana	333	6,575
Ksour-Essaf-Cité Hached	142	3,197
El Jem-Cité Mohamed V	91	3,009
Chichia-Cité Annar	51	25,370.
Tozeur-Ennahdha 3	178	88,690
Houmet Souk-Boumellal	47	2,027
Projets engagés (31 quartiers )	3.180	752,535
Projets à engager (9 quartiers)	1.247	63,760
<b>Total (40 quartiers)</b>	<b>4.427</b>	<b>816,296</b>