TUNISIA
Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

GEF Project Document

Middle East and North Africa Region
MNSRE

Date: January 24, 2005
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Project ID: P069460
Focal Area: B - Biodiversity

Team Leader: Allan Rotman
Sector(s): General water, sanitation and flood protection sector (50%), General agriculture, fishing and forestry sector (30%), Sub-national government administration (20%)
Theme(s): Biodiversity (P), Environmental policies and institutions (S)

Project Financing Data

[ ] Loan [ ] Credit [X] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Amount (US$m): GEF Grant 6.31

Financing Plan (US$m): Source	Local	Foreign	Total
BORROWER/RECIPIENT	3.50	0.00	3.50
GLOBAL ENVIRONMENT FACILITY	6.31	0.00	6.31
Financing Gap	-6.31	6.31	
Total:	3.50	6.31	9.81

Borrower/Recipient: GOVERNMENT OF TUNISIA
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Estimated Disbursements (Bank FY/US$m):

FY	2006	2007	2008	2009	2010				
Annual	1.50	2.90	3.01	1.50	0.90				
Cumulative	1.50	4.40	7.41	8.91	9.81				

Project implementation period: 5 years
Expected effectiveness date: 04/30/2005 **Expected closing date:** 06/30/2010

A. Project Development Objective

1. Project development objective: (see Annex 1)

The project development objective is to:

- Establish a functional integrated monitoring and participatory management system for the project area to manage biodiversity degradation in the Gulf of Gabès region.

2. Key performance indicators: (see Annex 1)

The key performance indicators for the Project are:

- Number of project staff in place
- Fiduciary reports submitted
- Number of training sessions carried out and number of attendees
- Number of local development committees formed and report on effectiveness of participation of stakeholders
- Baseline indicators for marine fish (native and alien) species and habitats, key water quality indicators, and large significant Posidonia (sea grass) areas –*annual reports for first two years*; and scientific monitoring on the trends for main biodiversity indicators – *annual reports after first two years*
- Number of biodiversity management plans (goal is to prepare 6 plans and to implement 3 plans)
- Cumulative scores based on the "Management Effectiveness Tracking Tool" for the biodiversity management plans at the six pilot sites
- Long-term strategy prepared for biodiversity sustainability for Gulf of Gabès, which will include plans for replication of biodiversity management plans

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project: (see Annex 1)

Document number: 28791 TUN **Date of latest CAS discussion:** 06/03/2004

The project directly supports the Tunisia CAS, to ensure that social and environmental concerns are properly addressed, as described in CAS Outcome 1.4, within Objective No.1. The project will contribute to safeguarding natural resources including land and water conservation. The project will also contribute to increasing the benefits of other large public sector investment programs in urban wastewater treatment, industrial pollution control, improved urban management, tourism development, and fisheries.

1a. Global Operational strategy/Program objective addressed by the project:

The project forms part of the Global Environment Facility (GEF) Operational Strategy for preserving biodiversity, specifically GEF Operational Program 2, that involves coastal, marine and freshwater ecosystems and the project is also relevant to Operational Program 8.

Operational Program 2 responds to three directives from the Conference of Parties (COP) at the Convention on Biological Diversity (CBD) to the GEF. At its first meeting, COP 1 set the priorities for the programs, which include: (i) projects which encourage the conservation and sustainable use of the

biological diversity of threatened coastal and marine resources, and (ii) projects which encourage the conservation of biological diversity and sustainable use of their resources in the other vulnerable areas.

The COP also recommended the *" integrated management of marine and coastal areas, because this type of management provides the most suitable framework for tackling the problem of the effects of human activities on marine and coastal biological diversity and to encourage the conservation and sustainable use of this diversity"*. The Gulf of Gabès project fits directly within the above guidelines.

The project area is included as a regional priority in the Global Representative System of Marine Protected Areas (World Bank, 1995) because of its extensive *Posidonia* meadows (sea grass) and associated biodiversity. The sea grass meadows are considered the most extensive in the Mediterranean. The project is also identified in the World Wildlife Fund (WWF) Gap Analysis (2001) as one of 13 priority areas for biodiversity protection in the Mediterranean.

The main objectives of GEF's Operational Program 2 are *"the conservation and sustainable use of biological resources in coastal, marine and freshwater ecosystems in general"*. This will be accomplished by preserving: (a) the biological resources through conservation areas that will be set up and strengthened with focus on coastal, marine and freshwater ecosystems in tropical and temperate zones which are under threat, and (b) planning for sustainable use of resources, with integrated objectives for conservation of biological diversity, productive uses and socio-economic development.

The project is consistent with the objectives of GEF Operational Program 2 goals and hypotheses. Also, Tunisia ratified the main international conventions and treaties on the protection of habitats and species.These include CITES (1974), UNESCO World Heritage (1974), Ramsar Convention (1979), Desertification Convention (1979), Bonn Convention (1986), Convention on Biological Diversity (1993), and Bern Convention (1995).

Emerging GEF priorities. The project is consistent with Pillar 1 (protected areas) and Pillar 2 (mainstreaming biodiversity in production). The six pilot sites will build capacity and provide valuable lessons for managing marine protected areas. The project will also provide useful models and monitoring tools for integrating biodiversity issues into mainstream development, especially into decisions on coastal zone management, urban development, tourism and fisheries.

The monitoring and evaluation of data on key species, including invasive alien species (note 1), will feed into decisions related to managing the coastal zone. Monitoring alien species will provide valuable information on pathways and potential control mechanisms, which is important for the whole Mediterranean basin.

Note 1: "Alien species" covers all animals and plants that do not originate in the Gulf region and whose introduction is due to deliberate or unintentional actions such as natural passage through the Suez Canal (Lessepsian migration), contained and transported by ballast water or ship hulls, or imported for fish-farming or aquariums. These species are also defined as "introduced," "exotic" "invasive species", and "invasive alien species".

2. Main sector issues and Government strategy:

Several Government policies on the environment, biodiversity and development support the proposed project. The National Strategy for the Protection of the Environment and Sustainable Development defines priority areas and actions to be undertaken; the National Action Plan for the Environment (NEAP) and the National Strategy and Action Plan for Biodiversity (1988) are the most important policy instruments

carried out to date. The latter, financially assisted by the GEF (Biodiversity Enabling Activity, through the World Bank) involved participation by universities, research centers, ministries, agencies and major environmental NGOs.

The priorities in the National Strategy for Biodiversity include (a) improving scientific knowledge, (b) preventing further deterioration of genetic capital and biodiversity, (c) improving the protection and management of crucial ecosystems, (d) integrating the protection of biodiversity into sectoral strategies and (e) strengthening institutions and regulations. The Government is aware that to manage biodiversity in an integrated manner, policy and site-specific actions are required. At the policy level, the Government works on biodiversity issues through the Ministry of Environment and Sustainable Development (MEDD) and the Ministry of Agriculture and Water Resources (MARH). Both ministries are focusing greater institutional attention to integrate water and natural resources management issues in a more efficient and sustainable manner. At the site-specific level, the Government is committed to working closely with communities, with MARH having a decentralized administrative structure that facilitates the participation of beneficiaries and users in rural areas during the implementation of projects.

This project adopts both a participatory and an integrated sustainable management approach that complements the ongoing Government strategy for efficient and decentralized local investments.

3. Sector issues to be addressed by the project and strategic choices:

The project will address the sector issues identified in the 1988 National Biodiversity Strategy, through a set of project actions to reduce biodiversity threats and through a joint program of stakeholder and Government staff participation covering the Gulf of Gabès region. The latter project actions will contribute to better harmonization of planning with other investment programs and projects, while mitigating on-going or potential threats to biodiversity.

The project complements other projects in the biodiversity sector, such as Protected Area Management, funded by the GEF. The latter project includes three national parks, two of which are forests and one which includes a wetland area at Ichkeul Park, in northern Tunisia. A close link will be established to share experiences and also to coordinate with other regional projects that address similar issues (see Section D.2 for a list of projects co-financed with other development agencies).

The Government has adopted a national tourism strategy, which generates major revenue but also threatens biodiversity, especially in coastal areas where hotels are concentrated. The project will contribute to this sector strategy through several sub-components. At the sector level, a sector environmental assessment report will be prepared to evaluate the overall threats to biodiversity of the national tourism strategy. At the site level, a biodiversity management plan will be implemented for the major tourism area in the Jerba-Zarzis zone. In the Kneiss Islands, the project will explore ways to develop sound small-scale eco-tourism, by supporting public awareness about biodiversity threats, and by integrating the efforts of the local NGOs to improve management of this pilot area.

The project will also innovate at the sector level by expanding the scope of the traditional land-use plans for sensitive coastal areas implemented by the *Agence de Protection et d'Amenagement du Littoral* (APAL). The innovative approach will target both the marine and coastal resources in an integrated manner, rather than only the terrestrial coastal shoreline now subject to management by APAL.

The GEF project will also identify monitoring techniques for replication to manage the urban and industrial

threats to biodiversity. For example, the complex relationship of the effects of water quality and currents will be targeted. In the Bou Ghrara lagoon, the effects of widening the channel under the man-made Roman causeway will be studied through ecological and hydro-sedimentary studies. Similarly key indicators for water quality threats to the complex habitats provided by *Posidonia* (sea grass) beds will also be identified, and management measures designed. In summary the project will facilitate the integration of several on-going initiatives in Tunisia that affect the protection of coastal and marine areas.

Strategic biodiversity issues. Authorities are aware that the long-term shrinkage of the *Posidonia oceanica* sea grass beds is a difficult process to reverse, and will require sustained effort over at least the next 15-20 years and longer. The scientific causes of this long-term trend are poorly understood, both with respect to ecological processes and geographic locations. Thus, the project will upgrade baseline data and monitoring research to (a) better understand the interaction between sea grass beds, fish reproduction, spawning and population growth, and (b) identify, on a pilot basis, appropriate management mechanisms to conserve the significant areas for sea grass beds and the associated high levels of biodiversity.

The project preparation studies show that the Gulf region has been degraded by (a) over-fishing and sea-bed trawling and (b) wastewater pollution from urban (household) and industrial (e.g. phospho-gypsum) sources. The urban wastewater effluent sources are being remedied along the coast, largely through a national investment program to extend sewers and construct wastewater treatment plants (under ONAS, the agency responsible). The urban solid waste problem is being addressed through an ambitious program to improve collection and disposal (through the ANPE's PRONAGDES program). The sources of industrial effluent along the coast are also being remedied. One major phospo-gypsum plant has been closed in Sfax. The other major production plant in Sfax already uses a dry production process, that avoids disposal of liquid effluents into the Gulf. For the major phosphor-gypsum plant in the town of Gabès, an on-land storage solution will be adopted to eliminate industrial effluent disposal into the Gulf. The technical studies are completed and the funding is secured (with financial assistance from the European Investment Bank); the construction activities for rehabilitation of the plant will take place over the coming years.

Since the Government is already investing heavily in basic environmental protection infrastructure, and pollution is only one factor in biodiversity loss, the project will focus on a range of issues that could halt biodiversity decline (such as coastal development, over-fishing, trawling, alien species and unprotected marine area).

Tunisian authorities are also aware that throughout the project area and at all levels—from small coastal communities to large Government institutions—strengthened management, training and awareness activities are required to improve the conservation and sustainable use of biodiversity. The project will increase collective awareness of the need for and benefits of biodiversity protection, and instill in stakeholders a more responsible attitude—a prerequisite for managing the natural environment in a sustainable way. For example, the project includes institutional strengthening activities: (a) training to more effectively apply existing regulations, (b) new guidelines to improve sustainable fishing techniques, (c) public awareness on over-fishing issues, and (d) guidelines for more effective ballast water management to manage the release of alien species.

The goal of these broad actions is to develop better understanding and management techniques that could be applied to the entire Gulf, since an area of this size can only be restored over many decades.

Selection of pilot sites (see Map IBRD 33784 in annex). The following are the six (6) geographic pilot sites selected for conservation of biodiversity resources through management plans:

(i) The Kerkennah Islands,
(ii) Kneiss Islands,
(iii) Gabès Oasis (the western-most coastal oasis),
(iv) Gulf of Bou Ghrara,
(v) Bahiret El Bibane, and
(vi) A sea grass area (initial pilot site near the Kerkennah Islands).

Rationale for selection of pilot sites. The Kerkennah Islands, Kneiss Islands, Gulf of Bou Ghrara and Bahiret El Bibane are well preserved in terms of marine biodiversity or have not yet experienced irreversible damage. Also the Kerkennah Islands are surrounded by rich sea grass areas, which are representative of the Gulf's unique biodiversity.

All six sites have a high level of biodiversity ("hot spots"), with one or several of the following characteristics: (a) huge beds of *Posidonia* sea grass, (b) unique "banded" sea grass beds (c) pivotal Mediterranean ecosystems, and (d) exceptional concentrations of birds. By protecting these habitats, representative examples of the Gulf's high biodiversity value will be preserved (see Annex 11 for Baseline Biodiversity Description).

The selection of a sea grass area is a new and unique element for biodiversity protection in Tunisia, and it will address three issues simultaneously: (a) conserving species and ecosystem diversity; (b) piloting a management concept to reach a compromise between the various stakeholders, resource uses and biodiversity protection, and (c) monitoring ecological interactions to identify benefits from biodiversity and improved catches for small-scale fishing.

All six areas are vital to biodiversity, are important for sustainable development, and are included for piloting management plans that can be replicated elsewhere along the Tunisian coast. Examples of activities for replication include eco-tourism (i.e. Bou Ghrara and the Kneiss Islands), and a fishing concession at Bahiret El Bibane. The management plans at the Gabès Oasis, the Kerkennah Islands, and in the sea grass pilot area will yield valuable replication lessons on participatory techniques and issues that need joint actions by stakeholders and Government agencies.

Since the project is constrained by relatively short time frame for implementation (five years), the activities for the pilot areas will be carried out in two phases: (a) preparation and implementation of biodiversity management plans for the three priority sites of the Gulf of Bou Ghrara, Kneiss Islands, and the sea grass area, and (b) preparation of management plans for Kerkennah Islands, Gabès Oasis and Bahirat El Bibane.

C. Project Description Summary

1. Project components (see Annex 2 for a detailed description and Annex 3 for a detailed cost breakdown):

The project has four components, estimated at US$9.81 million, of which the GEF will fund US$6.31 million.

Component 1: **Institutional strengthening, strategic planning and dissemination** (estimated at US$3.94 million). This component includes:

(1) A Project Management Unit (PMU) and Project Operational Unit (POU) staffed by eight full-time civil service professionals, office and other equipment, map printers, digitizing platforms), operating costs and basic field equipment (e.g. boat, vehicles); (2) Quality control and evaluation for project activities, provided by short-term technical assistance (TA) experts; (3) Long-term strategy to protect biodiversity, including a workshop to disseminate project results to scientific/technical groups at the project, national, Mediterranean and international levels. The workshop will incorporate lessons from other GEF projects and plans to replicate project activities; (4) Strategic Environmental Assessment (SEA) to review the impact on biodiversity of the mid-to-long-term tourist development plan for the Gulf of Gabès; (5) A strategy to protect biodiversity areas from accidental petroleum and chemical spills, and (6) Terrestrial ecological inventory.

Component 2: Training and capacity building (estimated at US$1.35 million). This component aims to strengthen human resources for project management, technical, scientific and public participation skills to improve management for biodiversity. It includes:

(1) Training for full- and part-time project staff and high-level staff on managing marine and coastal biodiversity and developing project management skills (e.g. financial management, procurement, progress reporting, monitoring of key indicators, etc). These activities will combine classroom and on-the-job training to ensure the project is efficiently launched and implemented with adoption of a team approach across the various institutions; (2) A public awareness program for target communities, local stakeholder groups and the general public. It will draw on experience from other ongoing GEF projects in Tunisia; (3) Training and capacity building to help enforce biodiversity protection provisions in marine and coastal regulations. It is targeted at Government agency staff who enforce regulations for fisheries, solid waste, small and large ports, customs, coastal and wetlands areas, international treaties, etc., (4) Socio-economic surveys of target populations and other stakeholder groups, and (5) Preparation of a participatory methodologies for local development committees and other stakeholders to ensure incorporation of participation into biodiversity management.

Component 3: Baseline marine data acquisition and applied biodiversity monitoring (estimated at US$1.20 million). This component will acquire and update the technical/scientific data needed for biodiversity management plans, and then monitor key scientific project performance indicators. It includes:

(1) Hydrodynamic and water quality studies for the Gulf of Gabès and focused on the Jerba-Zarzis area; (2) Inventories and monitoring of marine and lagoon fish species of regional and global interest, to assist planning and implementation of the biodiversity management plans; (3) Inventories and monitoring of alien species and their distribution within the Gulf; (4) A regional management strategy to address ballast water disposal and alien species; and (5) Evaluation of biodiversity impacts from fishing fleets and preparation of guidelines recommending changes to fishing practices to ensure biodiversity sustainability.

Component 4: Participatory biodiversity management plans (estimated at US$3.32 million). This component will prepare sustainable biodiversity management plans for the six pilot sites and implement them in the three priority sites. All plans will be prepared through a participatory approach. It includes:

(1) Preparing a general methodology for the participatory biodiversity management plans, consistent with Tunisian laws; (2) Preparing and implementing the management plan for the sea grass area with an initial Pilot Site located near the Kerkennah Islands, including installation of anti-trawling structures and artificial reefs; (3) Taking inventories and mapping the marine plant cover, including *Posidonia* sea grass beds, to

fill the existing data gaps and widen the existing baseline data; (4) Monitoring network for significant sea grass beds; (5) Implementing the management plan for the Gulf of Bou Ghrara, which includes construction of a visitor center; (6) Implementing the plan for the Kneiss Islands, which includes construction of bird observation platforms; (7) Preparing a management plan for the El Bibane lagoon; (8) Preparing the management plan for the Kerkennah Islands, and (9) Preparing the management plan for the Gabès Oasis; and (10) A Geographic Information System (GIS) to serve as a database for the Information Exchange Center located at the POU in the town of Gabès. It will gather technical, scientific and social information on the Gulf of Gabès, create a user-friendly filing (archiving) system and regularly update project activities, as well as coordinate with existing information services (e.g. *Observatoires*) of Tunisian ministries.

Component	Indicative Costs (US$M)	% of Total	Bank financing (US$M)	% of Bank financing	GEF financing (US$M)	% of GEF financing
Component 1- Institutional Strengthening, Strategic Planning and Dissemination	3.94	40.2	0.00	0.0	1.37	21.7
Component 2 - Training and Capacity Building	1.35	13.8	0.00	0.0	1.26	20.0
Component 3- Baseline Marine Data Acquisition and Applied Biodiversity Monitoring	1.20	12.2	0.00	0.0	0.98	15.5
Component 4 - Participatory Biodiversity Management Plans	3.32	33.8	0.00	0.0	2.70	42.8
Total Project Costs	9.81	100.0	0.00	0.0	6.31	100.0
Total Financing Required	9.81	100.0	0.00	0.0	6.31	100.0

2. Key policy and institutional reforms supported by the project:

Tunisia has a strong institutional framework for environmental protection and an extensive civil service, that addresses all issues related to planning, administration and support for coastal and marine issues. Accordingly, no major institutional or policy reforms are considered necessary. However, the institutional diagnosis shows that considerable strengthening is necessary to facilitate inter-agency and inter-governorate coordination for accomodating the project objectives.

To be consistent with the national effort, the project will coordinate with the two protected area projects already supported by the GEF (i.e. Protected Areas Project and MEDWET Project). Also, the project will build capacity in Government staff who enforce regulations that protect marine and coastal biodiversity, such as staff working in the coast guard and fisheries department (MARH), as well as mainstream biodiversity issues into fisheries practices through the preparation and dissemination of a guide for sustainable fishing techniques. This will help the country meet its commitments to regional and international conventions more effectively.

At the regional level, the project will strengthen local participatory techniques for implementing innovative approaches to managing biodiversity so that this can be replicated elsewhere in the country. Staff capacity and institutional tools will also be improved through training programs for various levels of stakeholders and decision-makers.

The project will be the country's first attempt to introduce procedures to protect and manage marine and coastal biodiversity at the regional level (across several governorates and combined with marine areas) based on local participation and development planning (in terms of tourism and fisheries sectors). The

project will cover six sites in three governorates, and seek to coordinate the building of awareness for biodiversity values and economic planning on common objectives. The inter-agency and inter-governorate coordination activities are key institutional strengthening objectives supported by the project.

3. Benefits and target population:

Biodiversity benefits. The project will increase the coastal and marine areas already protected, further safeguarding the species of global or regional value and reducing damage to unique ecosystems. Most important, it will develop participatory management plans, update information on the Gulf's biodiversity, and create a data bank that will improve overall knowledge of biodiversity in the Western Mediterranean basin, particularly on alien species.

Some project sites have global importance in terms of bird life and plant species. For example, the Bou Ghara has significant waterfowl populations that can be protected with support from eco-tourism due to the high concentration of near-by hotel and tourist facilities. Although the Kneiss Islands are already protected as a reserve and classified as a Specially Protected Area of Mediterranean Interest (ASPIM), they do not benefit from an active management program. The project will add a full public awareness program and develop additional mitigation measures to protect the waterfowl nesting and stopping-over habitat on the islands. The Gabès Oasis will have a management plan to conserve what is the only example of a coastal oasis, by reducing the threats to its unique plant and wildlife species now pressured by urbanization, industrial pollution, and inappropriate cropping practices. El Bibane and the Kerkennah Islands have exceptional marine benthic formations, unique in the Mediterranean and the world. Situated in areas already or soon to be developed, they will be preserved with the active stakeholder participation from local fisherman who earn their livelihood from these marine areas.

In general, large areas of *Posidonia* sea grass—the Gulf's outstanding feature—have shrunk severely over the past decades due to destructive fishing practices, and possibly also due to urban and industrial pollution. Those large expanses of *Posidonia* that remain will be identified, delineated on maps and their productive ecosystems will be monitored, so that the threats to biodiversity can be managed and their benefits to fisheries be better identified. One *Posidonia* site will be subject to a management plan that will include a perimeter of anti-trawling structures combined with artificial reefs. This will protect the marine life within the management area, encourage increased productivity of adjacent marine areas and eventually improve revenues from small-scale fishing.

National, local benefits and target population. Protecting rare or native species will help maintain Tunisia's rich biodiversity. Training for NGOs and institutions, strengthening enforcement capacity for protection of biodiversity laws and regulations, and improving regional institutional arrangements will expand the country's capacity to preserve and manage its natural resources. These institutional strengthening benefits will facilitate the replication of the management plans at other sites in Tunisia, thus reducing implementation costs and the risks of future failure.

At the local level, the project will introduce and test mechanisms to help communities, authorities and NGOs manage natural resources more efficiently. The target populations for participation in biodiversity management include (a) communities that exploit coastal marine resources at the various pilot sites—mainly small-scale fishermen, (b) farmers in the Gabès oasis, (c) local NGOs active in development and environmental protection, (d) local professional organizations and authorities, and (e) the tourism sector (particularly in Jerba-Zarzis). The main participatory approach is to form a local development committee for each of the six pilot sites. This will be particularly beneficial for encouraging sustainable fisheries practices near the pilot areas of the Gulf of Bou Ghrara and the sea grass area near the Kerkennah Islands. The anticipated benefits of carefully implemented biodiversity management are increased fish

stocks, due to the cumulative effects of reducing over-fishing, decreasing destruction of habitats, and increasing the productivity of the ecosystems (e.g. spawning of fish). Also, the benefits associated with the pilot areas are to further develop tourism — by generation of jobs and alleviation of persistent poverty levels in the rural south.

4. Institutional and implementation arrangements:

The agency selected to implement the project is the *Direction Générale de l'Environnement et la Qualité de Vie* (DGEQV), part of MEDD. DGEQV's Director General reports to the Minister of Environment and Sustainable Development. This choice was based on the leadership that DGEQV provides for biodiversity policy issues, and on their coordination experience gained while leading the project preparation. Three o ther institutions will implement other components of the project. They are (a) *Centre International des Technologies de l'Environnement* (CITET), which will supervise Component 2 of the project involving activities for training and capacity building, (b) *Institut Nationale des Sciences et Technologies de la Mer* (INSTM), which will supervise Component 3, involving baseline marine inventories and applied monitoring studies, and (c) APAL, which will supervise Component 4 involving preparation and implementation of the participatory management plans (See Section E.4 for a summary description of the institutional and project management arrangements, and a detailed analysis in Annex 12).

D. Project Rationale

1. Project alternatives considered and reasons for rejection:

During project design, various institutional, geographical and technical alternatives were considered to determine which would be easiest to implement and most likely to succeed. The criteria were: (a) regional goals for the Gabès region and the financial resources available, (b) the Country Assistance Strategy (CAS) between Tunisia and the World Bank, and (c) GEF funding eligibility criteria.

Selection of strategic focus for the project. The problem of urban and heavy industrial pollution—mainly from large urban areas and the phospho-gypsum processing sector — was an important factor in designing the strategic focus for the project. During preparation, these threats to biodiversity were considered. To reduce urban pollution, the Government has made considerable investments in wastewater facilities. Currently, collection and treatment of wastewater is much higher than in many neighboring countries. In particular, the Government has already heavily invested in eliminating direct industrial liquid effluent disposal into the Gulf of Gabès, particularly in the town of Sfax, by dismantling a large phospho-gypsum processing plant. It is also committed to a similar large industrial pollution control investment for the phospho-gypsum plant in the town of Gabès. The new investment will elimnate liquid effluents by installing a new production technology that produces a dry waste by-product that can be stored on land. Similarly major investment efforts for solid wastes are underway by the Government under its PRONAGDES program that will construct new sanitary landfills in the major urban centers. All these investments for control of urban and industrial pollution sources are continuing under Tunisia's Tenth Economic Development Plan (2002-2006).

It was therefore decided to focus the strategic actions of the project on indirect biodiversity threats, rather than on direct sources of pollution threats or on pollution control. The first strategic action of this GEF project is to focus on specific geographic areas that already have high levels of biodiversity that need to be maintained. The project will not try to adopt site-specific protection measures for the entire Gulf, since to rehabilitate large areas of *Posidonia oceanica* (sea grass) beds would take generations. Instead, this GEF project aims to complement the considerable investments in environmental protection infrastructure already

constructed and on-going by the Government. Thus this first strategic focus will target site-specific direct and indirect biodiversity threats, which could accelerate at any time.

The second strategic focus is to addresses broad-based biodiversity threats for the entire project region through knowledge and capacity building. The project will support information gathering on: (a) baseline data, (b) biodiversity monitoring –so public sector managers and all stakeholders understand the interactions within the marine and coastal ecosystems, (c) capacity building, to enforce laws and regulations, and (d) public awareness and participation about general and site-specific issues.

Selection of pilot sites. The project preparation analysis, which covered the entire Gulf of Gabès, found that while large areas have limited biodiversity uniqueness, several sites offer rich biodiversity relatively unaffected by economic development and other threatening activities. Thus, it was decided to protect the most exceptional sites from existing and potential threats as soon as possible. The option of rehabilitating already degraded sites—where major areas of *Posidonia* sea grass beds have declined over decades—was rejected, since it would take decades to regenerate and expand them. The chosen approach is to prepare management plans for pilot sites, which will eventually be replicated and expanded to other sites in the Gulf with important global or regional marine and coastal biodiversity.

Alternative institutional arrangements considered. The first alternative considered was creation of a new institutional entity. This institutional arrangement was rejected because (a) the Government already has many agencies with overlapping responsibilities for marine and coastal resources, and (b) on project completion, a new entity might not have enough resources to maintain sustainability or undertake replication of management plans, given the continual budget pressures on the Tunisian public service.

The second alternative considered was to use an existing institutional entity. A total of four existing agencies were evaluated: (i) DGEQV, (ii) Regional Directorate for the Southern Coastal Region (DRLS), (iii) APAL and (iv) ANPE (see Section E.4). The project's PMU will be in an existing entity (i.e. DGEQV) within an existing ministry (i.e. MEDD), since this offers the best option for sustainability. As noted above, the DGEQV, was chosen since it already has leadership responsibilities for biodiversity issues and it could build on the experience gained during project preparation. Furthermore, its mandate is to coordinate overall environmental strategy and policies, so that this alternative gives the best chance to replicate the project's models.

The third institutional arrangement considered was to use contractual staff funded by the project for the PMU and POU, rather than Government funded civil service staff. This alternative was rejected because it would not be sustainable.

2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned).

Sector Issue	Project	Latest Supervision (PSR) Ratings (Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
Bank-financed			
Participatory management of natural resources; poverty alleviation	Natural Resources Management Project (Loan 4162, $26.5 m, closed 06/30/2004)	S	S
Participatory management of national	Protected Areas Management	S	S

parks; conservation of global biodiversity; partly financed by GEF	Project (Total project $9.88 m ongoing)		
Participatory natural resources management; poverty alleviation	Northwest Mountainous Areas and Forestry Development Project (Total project $44.86 ongoing)	S	S
Managing Integrated water resources; conservation water resources and protecting the environment	Water Sector Investment Project (Total project $258 m ongoing)	S	S
Wastewater sewer trunk lines, rehabilitation water treatment plants, TA	Water Supply and Sewerage Loan (Loan 3782, $58.0 m, closed 06/30/2004)	S	S
Other development agencies			
UNDP financed by GEF and French GEF	MEDWET Regional Project: Conservation of Wetland and Coastal Ecosystems in the Mediterranean Region - Ongoing		
UNDP to be financed by GEF	Protected Marine Areas - IN PREPARATION		
MEDA / REMPEC	Project for port facilities for handling ballast water and hydrocarbons in the Mediterranean - Ongoing		
European Investment Bank / Govt of Tunisia	Project for phospho-gypsum land-based waste storage at Gabès - Ongoing		

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

The project will complement various regional programs. For example:

1. The recently launched REMPEC project, focused on waste and ballast water from ships, will benefit from the strategy study on management of alien species and ballast water and the capacity building to improve enforcement of regulations to protect the marine environment.

2. The Mediterranean Action Plan for the (MAP)-PAP/RAC, a coastal development program that has already planned an important rehabilitation scheme (the Taparura project in Sfax), will benefit since this project will further protect biodiversity in the Kneiss Islands and introduce a management plan in the Kerkennah Islands.

3. The RAC/SPA program, on managing the ASPIM and biodiversity, will benefit from the project activities for the Kneiss Islands, which has recently been classified for protection by ASPIM.

4. The regional program Mediterranean Environment Technical Assistance Program (METAP) initially contributed considerably to the creation of APAL. The project includes APAL as a special partner agency, and its staff technical and administrative skills will be enhanced.

5. The Marine Protected Areas project continues to be prepared by the Government with assistance of UNDP as the implementing agency for GEF. The DGEQV and APAL are involved in this preparation work, and coordination meetings are regularly held in Tunisia with the two GEF implementing agencies (UNDP and World Bank), to ensure that there will be no duplication of activities or geographic areas.

3. Lessons learned and reflected in the project design:

There two on-going GEF financed projects in Tunisia to protect biodiversity: (i) WB/GEF P048315: Protected Areas Management Project (GEF implementing agency: World Bank), and (ii) Regional MEDWET project : Conservation of Wetlands and Coastal Ecosystems in the Mediterranean Region (GEF implementing agency: UNDP). Both projects are being carried out through the same agencies (DGEQV and APAL), and both offer important lessons on coordinating the efforts of the agencies involved. Feedback from early implementation of these projects has been built into project design, as are lessons from Bank efforts in marine and coastal biodiversity (see Assessment of Integrated Coastal Area Management Initiatives in the Mediterranean-1988 to 1996: published by METAP). Once this new project is effective, feedback will be shared with the other two projects on common issues such as indicators, community participation, scientific monitoring results, and planning for sustainability.

During the design phase, the project considered the GEF's post-evaluations on biodiversity projects in Africa along with Bank-wide evaluations on biodiversity, conservation and eco-tourism. The various lessons on project design have been incorporated: the importance of stakeholder participation, ensuing clarity of objectives and components, incorporating past experience, identification and management of risks, effective monitoring and evaluation. Specifically a new technique to monitor implementation progress is being adopted, as based on international experience. For all the six pilot areas the methodology to be used is based on "Reporting Progress at Protected Area Sites – A Site Level Management Effectiveness Tracking Tool " prepared for the World Bank/World Wildlife Alliance for Forest Conservation and Sustainable Use, May 2003, and "Score Card to Assess Progress in Achieving Management Effectiveness for Marine Protected Areas", published by World Bank, Revised Version-July 2004. This methodology has been specifically developed as a practical tool to measure implementation progress for this type of project, and is being adopted for most GEF biodiversity projects internationally.

4. Indications of borrower and recipient commitment and ownership:

In recent years, the Government defined a framework to protect and manage the country's biodiversity. Its National Action Plan for the Environment (1997), National Strategy and Action Plan for Biodiversity (1998), and ratification of international and regional agreements, indicate its profound commitment. The Government sought Bank assistance to prepare the Gabès project in 1999 with a grant awarded from the GEF Project Development Fund. An inter-ministerial Steering Committee which included staff from various ministries and agencies, were created at project preparation to coordinate on policy issues. The DGEQV, with close attention from senior management at MEDD prepared the project. Numerous meetings and constant attention (by many stakeholders) indicate Tunisia's commitment to the project.

5. Value added of Bank and Global support in this project:

The Bank and GEF add value from their experience in project design and implementation. Further, funding principles of GEF allow the Government to rapidly launch activities to protect biodiversity that might not otherwise be funded as a short-term budget priority. This early funding adds support to the decentralized participatory management plans to protect biodiversity of global value that otherwise would not be part of Government priority activities. At the regional level, value will be added due to GEF funding for sharing of scientific knowledge and promoting exchange with institutions in other countries involved in similar projects with global objectives.

E. Summary Project Analysis (Detailed assessments are in the project file, see Annex 8)

1. Economic (see Annex 4):

○ Cost benefit NPV=US$ million; ERR = % (see Annex 4)
○ Cost effectiveness
● Incremental Cost
○ Other (specify)

For GEF projects an incremental cost analysis is the methodology for economic analysis (see Annex 4).

The baseline scenario for the incremental cost analysis shows the enormous financial efforts by the Government to reduce urban and industrial sources of pollution, and to improve conditions for the local population in the governorates in the project area. Approximately 80% of the population in the three major governorates of the project area live along the coastal areas. In addition the Government is supporting numerous biodiversity activities within the baseline scenario, which is calculated at US$278.88 million. The GEF scenario reflects the added cost of the project (US$9.81 million). The Government will co-finance part of the project cost (US$ 3.50 million), and is thus requesting a GEF grant of US$6.31million.

2. Financial (see Annex 4 and Annex 5):

NPV=US$ million; FRR = % (see Annex 4)
not applicable

Fiscal Impact:

not applicable

3. Technical:

The technical description of the biodiversity resources for the project area is fully described in Annex 11, as are the threats to the rich biological resources in the Gulf of Gabès. The technical biological descriptions of the biodiversity resources at each of the six pilot sites are also fully described.

The *Posidonia* beds in the Gulf of Gabès are considered the most extensive in Tunisia and the Mediterranean, and are critical to maintain water quality and habitats for almost all commercial fish and crustacean species, as well as special marine indicator species such as turtles. There is a direct link between the presence of these beds and sustainable fish production.

Given the tidal range in the Gulf, which is almost unique in the Mediterranean (with the exception of the northern Adriatic Sea, between Venice and Trieste), the vertical amplitude of the medio-littoral zone is exceptional, with particular biological characteristics and highly diverse fauna. Around the Kerkennah Islands *Posidonia oceanica* has an unusual and extremely original appearance: strips several tens of meters long by one-two meters wide weave through beds of *Cymodocea nodosa* and *Caulerpa prolifera,* between 0.5m- 3m deep. Along with coral-producing areas, this is the main biodiversity reservoir, with

nearly 20% of all species in the Mediterranean, i.e. a total of several thousand, have been spotted near the Kerkennah Islands.

Due to this exceptional sea grass habitat near Kerkennah Islands, a pilot site with a surface area of several square km and depths of 5-35 meters was selected. This will be the first management plan implemented and it will test appropriate designs, transport methods, and installation techniques for 100-200 anti-trawling and artificial reef structures. These structures will form a surrounding perimeter to protect against unsustainable fishing practices. In addition, participation techniques for local stakeholders will be launched early in the project. These experiences and lessons learned will be used in the other five pilot sites.

4. Institutional:

The Government has several ministries and agencies involved in the protection of biodiversity and economic development in the coastal and marine areas of the Gulf of Gabès. The background of the institutional structure is described in Annex 12, and the sections below summarize the analysis of the institutional arrangements for implementation.

4.1 Executing agencies:

Four entities were evaluated to be the executing agency as summarized below, while two others agencies: (i) Directorate General of Fishing and Aquaculture of the Ministry of Agriculture (DGPA) within MARH, and (ii) Southern Development Office (ODS) were considered. The analysis of these latter two agencies was not continued in depth, since their administrative responsibilities and human resource capacities were not consistent with proposed project activities.

DGEQV (at the national level within MEDD). As this project is considered a national priority, the DGEQV was chosen as the leading implementing agency as the precedents it creates will be replicated best by a national-level entity. The DGEQV is also the focal point for GEF. The DGEQV has the experience and mandate to coordinate the activities of other agencies, as well as interact with all stakeholders

DRLS (at the regional level within MEDD). Although the DRLS coordinates activities by stakeholders and agencies at the regional level, it has only limited financial and procurement capacity to implement the project.

APAL (at national and regional levels within MEDD). The national strategy and policy for the protection of coastal areas is under the leadership of MEDD who is also responsible for all policy decisions. MEDD coordinates all the actions of the various institutions within MEDD including APAL. Accordingly APAL is responsible for:

- management of the coastal fringe (*espace littoral*) through studies and the regulations of physical structures;
- management of the public marine land (*Domaine Public Maritime - DPM*);
- undertaking of studies to protect and develop the potential of natural zones;
- data collection and monitoring of the status of coastal ecosystems.

ANPE (at national level within MEDD). The main role of this environmental protection agency is to enforce all regulations against various forms of environmental degradation, including pollution control and approving environmental impact assessments. ANPE does not have a specific institutional mandate for coastal and marine areas, its ability to replicate the pilot areas and provide leadership in sustainability is limited.

The above analysis shows that both ANPE and APAL, with their regional offices and national mandates have the capacity to implement the project at the regional and local level, and both have efficient project management structures. However, only DGEQV within MEDD has the clear national role to mainstream environmental issues and coordinate strategies among national agencies.

Thus, DGEQV was selected as the implementing agency responsible for overall leadership, project management and coordination. Several partner agencies will still participate in the project to deliver technical and specialized capacity, as described below.

4.2 Project management:

1. National level Project Management Unit (PMU) (located in Tunis). The central PMU within DGEQV, will oversee project implementation and coordination (for all technical, scientific and financial tasks). The National Director (part-time position) and National Coordinator (full-time position) are staff members from DGEQV and will report to the DGEQV Director General. Also, a financial management specialist and assistant, as well as a procurement specialist will report to the National Director. The PMU will coordinate all aspects of procurement for contracts and financial management with staff from MEDD based in Tunis (see organization chart in Annex 12). The PMU will prepare regular progress reports (twice a year), that will describe the project's key performance indicators and corrective measures needed in the event of lack of progress towards the development objectives or other delays in project components. The technical supervision of field investigations and analysis of results during contract implementation will be carried out by specialists in the POU as described below.

2. Regional level Project Operations Unit (POU) (located in town of Gabès). A POU in the town of Gabès, will provide the technical capacity to supervise implementation of all project activities. It will also ensure participation of local stakeholders in preparing management plans for the six pilot sites. The POU will be coordinated by a POU Director (a full-time position), with part-time support of a regional advisor. Other full-time staff will be responsible for various tasks, such as the information exchange center and studies (Component 1), capacity building/public awareness (Component 2), marine/coastal biodiversity (Component 3), and biodiversity management (Component 4). Staff will also include a GIS specialist, financial assistant and support staff (see organization chart in Annex 12).

Supervision of project implementation is divided into four components (as described above), with a separate agency responsible for each: Component 1, DGEQV; Component 2, CITET; Component 3, INSTM (*Institut National des Sciences et Technologies de la Mer*) and Component 4, APAL.

3. Local participation. At minimum, six local development committees (local DCs) will be created at each pilot site. They will regularly contact local communities, groups and individuals, and help develop the integrated management plans for each pilot area. There are also existing Goveronate level DCs that are regularly consulted on regional issues, and additional participatory mechanisms and techniques will be developed to address project issues as required during project implementation.

4.3 Procurement issues:

A full description of the procurement issues is set out in Annex 6, and summarized below.

The procurement procedures described in the operations manual and the procurement plan submitted to the Bank were reviewed and found satisfactory. The methods of procurement, the timetable and the procurement responsibilities for each partner agency are clearly set out, as is coordination between the agencies for procurement.

Still the assessment of the overall procurement capacity for the project is determined as high, due to the high proportion of consultant services contracts to be procured (more than 60% of total project costs), the limited exposure of the partner agencies to the Bank's consultant guidelines, and the limited availability of procurement dedicated staff. To mitigate this high procurement risk, the project design includes a full time procurement specialist at the PMU for the first two years of the project. A detailed job description developed specifically for this procurement specialist at the PMU is set out in the procedures manual. In addition, TA support by an internationally experienced procurement specialist is planned for several months at the beginning of the project implementation.

4.4 Financial management issues:

A full description of the financial management issues is set out in Annex 6, and summarized below.

The assessment for financial management issues, including the required support by a financial management for the PMU during the 5 years implementation period has been reviewed by the Bank, and found satisfactory. A detailed job description developed specifically for the financial management specialist at the PMU is set out in the procedures manual. The assessment of the overall financial management risk for the project is determined as low.

The assessment reviewed the systems for accounting, internal controls, information and reporting, as well as financial management organization structures and audit arrangements at DGEQV, APAL, CITET and INSTM. The financial management capacity at these key implementing partners are assessed as satisfactory and pose no major risks to Bank funds. The reporting on the use of Bank funds will be coordinated through the PMU, and the procedures set out basic reporting data from each agency to assure smooth implementation. A Country Financial Accountability report has been produced, and the Government system has been assessed in various Bank financed projects and is considered satisfactory.

Each partner institution has an established tradition of financial management including qualified staff, accounting and reporting systems, internal controls, and annual external audit arrangements; also, each implementing agency has an adequate system. The operations manual outlines the working relationships and procedures for the institutions, including advances from the special account, and definitions for operating expenses and other disbursement categories. The manual also contains a formal inter-agency Project Agreement *("Convention")* between the four partner agencies that clarifies the internal Government procedures for budget requests, flow of allocated funds and recruitment of staff.

5. Environmental: Environmental Category: B (Partial Assessment)

5.1 Summarize the steps undertaken for environmental assessment and EMP preparation (including consultation and disclosure) and the significant issues and their treatment emerging from this analysis.

The project consists mainly of TA activities with only a few small structures to be built at the three priority

sites: (i) a visitor reception center in the Gulf of Bou Ghrara area, (ii) strengthening and rehabilitation of small infrastructure for the Kneiss Islands, and (iii) anti-trawling and artificial reef structures at the sea grass area near the Kerkennah Islands. The locations and designs for these small structures will be determined as part of the preparation of the final biodiversity management plans for each pilot site, and this will ensure that environmental impacts are avoided.

5.2 What are the main features of the EMP and are they adequate?

The Environmental Management Plan (EMP) is fully presented in Annex 13, and the EMP describes three major mitigation measures (i) mitigation through management plans to avoid environmental impacts, (ii) mitigation through participation of stakeholders to incorporate their knowledge about local threats to biodiversity, and (iii) mitigation through environmental monitoring of key indicators of fish species, habitat, water quality and significant areas of *Posidonia oceanica* sea grass beds.

5.3 For Category A and B projects, timeline and status of EA:
Date of receipt of final draft: June 30, 2004

5.4 How have stakeholders been consulted at the stage of (a) environmental screening and (b) draft EA report on the environmental impacts and proposed environment management plan? Describe mechanisms of consultation that were used and which groups were consulted?

During project preparation, several workshops were held with local stakeholders. Biodiversity threats and impacts, as well as the proposed mitigation and monitoring measures were discussed with the stakeholders, and subsequently incorporated into the project design. During project implementation extensive capacity building activities for stakeholders are planned under Component 2: (a) raising public awareness (b) forming local development committees at each pilot site to participate in preparing management plans, (c) consulting with NGOs, (d) training project staff, (e) strengthening enforcement regulations; and (f) holding workshops to share data with stakeholders and scientists. The goal is to strengthen the participatory approach, knowledge base and human resources that will sustain biodiversity in the long-term.

5.5 What mechanisms have been established to monitor and evaluate the impact of the project on the environment? Do the indicators reflect the objectives and results of the EMP?

The EMP for each pilot site will be reviewed by the project staff and Bank supervision missions. The key performance indicators described in Section A2 will also be continuously monitored, as they incorporate the environmental protection objectives of the EMP.

6. Social:

6.1 Summarize key social issues relevant to the project objectives, and specify the project's social development outcomes.

A key social issue is the dependence of the coastal population on the resources the project intends to protect, which include fishing (small-scale *artisanal* and large-scale commercial) and tourism. Instances may arise where local economic interests may be at odds to proposed project activities. Another issue is that the population in the southernmost part of the Gulf is poor, and many depend on the tourism industry for their livelihoods. This may in some instances be problematic since the project may attempt to control tourism to protect fragile biodiversity.

The expected social development outcome is to contribute to long-term sustainability through community participation and through identification of institutional and technical resources needed to reverse the biodiversity degradation. This will be done through the development of training for the beneficiaries and through their participation in the planning and development of management plans.

6.2 Participatory Approach: How are key stakeholders participating in the project?

Stakeholder participation (described earlier) is vital to ensure that their interests are balanced with those of conservation and that degraded biodiversity resources are protected against further decline. A strategy to promote this participation is based on two concepts: (a) stakeholders need to understand project objectives and social development outcomes, in order to take an active role in decision-making, and (b) their ideas and proposed solutions will be incorporated into project activities — particularly with respect to management plans.

While the project has proposed institutional and technical measures, these will be tested and tailored to local conditions at each pilot site, with the stakeholders' input. Using this approach, all management plans will be prepared with stakeholder participation. Also, stakeholders will (a) provide up-to-date information on local conditions (e.g. fishing, production, etc.) and will, in turn, become more aware about threats to biodiversity; (b) enlighten those proposing management measures about the measures the population is willing to adopt to sustain biodiversity resources; (c) jointly formulate the final agreed upon management mechanisms—which may involve temporary restrictions with respect to the use of resources—so they can secure sustainable future benefits.

6.3 How does the project involve consultations or collaboration with NGOs or other civil society organizations?

The project is based on a participatory approach that establishes cooperative relations between the national level PMU, regional level POU, the partner institutions (i.e. DGEQV, CITET, APAL, INSTM) and the beneficiaries, which include key stakeholders including NGOs that are active in coastal and island areas (such as Djerba and the Kerkenna islands). The project has taken into account current Government programs that deal with local development efforts (e.g. Agenda 21 in Djerba and Kerkennas), social protection and employment programs (e.g. the 26-26 program) and other relevant donor-assisted environmental protection projects that involve civil society. The goal is to define, with the stakeholders, the best methods with which to improve management of biodiversity resources, to meet the project's development objectives. The NGOs and other institutions that will be involved were identified and consulted during preparation, and during pre-appraisal and the pre-launch stage, to create Component 2 for training and capacity building.

6.4 What institutional arrangements have been provided to ensure the project achieves its social development outcomes?

The participatory approach is critical to project success. Firstly, the PMU and POU will discuss with the population and other stakeholders the project's goals, plans and benefits, particularly any potential restrictions to marine resources on which many in the population depend. The goal is to strengthen communication and trust. Secondly, local development committees will be formed for each of the six pilot sites, with members selected from local stakeholders, with training and resources to make them fully functional. Thirdly, on the ground implementation will involve regular visits to pilot sites to jointly identify with the local development committees, the management actions needed and their phasing. The site visits will also involve specific assessment of learning needs.

6.5 How will the project monitor performance in terms of social development outcomes?

The key performance indicators described in Section A2 will also be continuously monitored, as they incorporate the participation and social development outcomes. The first key indicators are the formation, and subsequent training for the six local development committees. Then the effectiveness of local participation will be measured as part of the overall scores for each pilot site under the "Management Effectiveness Tracking Tool".

7. Safeguard Policies:

7.1 Are any of the following safeguard policies triggered by the project?

Policy	Triggered
Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)	● Yes ○ No
Natural Habitats (OP 4.04, BP 4.04, GP 4.04)	○ Yes ● No
Forestry (OP 4.36, GP 4.36)	○ Yes ● No
Pest Management (OP 4.09)	○ Yes ● No
Cultural Property (OPN 11.03)	○ Yes ● No
Indigenous Peoples (OD 4.20)	○ Yes ● No
Involuntary Resettlement (OP/BP 4.12)	● Yes ○ No
Safety of Dams (OP 4.37, BP 4.37)	○ Yes ● No
Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)	○ Yes ● No
Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)*	○ Yes ● No

7.2 Describe provisions made by the project to ensure compliance with applicable safeguard policies.

OP 4.01 (see Annex 13): The Government has prepared an Environmental Management Plan (EMP), which has been disclosed to the public in Tunisia and at the Bank InfoShop in Washington D.C.

OP 4.12 (see Annex 14): The Government has prepared a Process Framework, which has been disclosed to the public in Tunisia and at the Bank InfoShop in Washington D.C. The Process Framework addresses the potential restriction of access to resources, although the potential affect on livelihoods has not been determined, and will not be ascertained once the management plans are prepared during implementation.

OPN 11.03: At present, no issues have been identified. During implementation, "chance find" procedures will be carried out, and project staff as well as Bank supervision missions will ensure that there is compliance with this policy during preparation of the biodiversity management plans.

F. Sustainability and Risks

1. Sustainability:

The design of the project that emphasizes community participation is to ensure that activities are sustained in a way that relates to the communities' concerns, and implemented with their assistance. For example, the Bou Ghrara site is near a heavily visited tourist zone that is well known nationally and internationally. Here, the project will work with the private sector, NGOs and Government agencies to identify how the threat of tourism can be transformed into an opportunity for developing and financially supporting sustainable biodiversity management.

The capacity-building activities are aimed at various levels of staff, from "on-the-ground" field staff to higher level decision-makers responsible for managing and enforcing regulations for the use of and protection of biodiversity resources. This approach, often referred to as "mainstreaming", will help individuals become more aware of issues and become more responsible for conserving biodiversity over the long-term.

The scientific monitoring studies for biodiversity indicators are designed to develop adequate baseline data to ensure long-term use for application of results. For example, all monitoring data collected will be stored

at the information exchange center in the town of Gabès. The center will offer easy access to the most recent data and will have it available for future use. The goal is to transform the center into a permanent regional data center (*observatoire*) for the Gulf. Other examples of activities designed for sustainability are (i) preparation of a technical guidebook on sustainable fishing practices, and (ii) a strategy to prevent biodiversity degradation from invasion of alien species from ship ballast water.

Finally a long-term strategy for biodiversity sustainability will be prepared for the Gulf de Gabès region before project closure. The strategy will plan for the longer term horizon of 10-15 years, and identify the institutional mandates, along with the resources required to reach a sustainable level of effort to protect biodiversity resources. The strategy will consider the technical, scientific, human and financial resources required, and identify the most relevant environmental and social issues. This strategy will include a plan for the next 5 year implementation period for the 3 pilot sites for which only management plans were prepared (Kerkennah Islands, lagoon El Bibane and Gabès Oasis), and also include a plan for replication of the management plans at other 3 pilot sites.

1a. Replicability:

As described in sustainability section, the key project activities are designed to continue after project completion. Replication can occur in the Gulf region, in Tunisia and Mediterranean region or at the international scale.

Replication would involve several activities: (a) implementing management plans at the next three pilot sites (Kerkennah Islands, Gabès Oasis and El Bibane lagoon) for which the Government is already planning resources; (b) identifying other sea grass areas in the Gulf to be managed with the biodiversity principles and monitoring techniques piloted during the project; and (c) repeating applications for the participation methods, scientific monitoring techniques, and project key performance indicators.

These goals are realistic, and are inherent in the project design that relies heavily on existing Tunisian capacity and structures. Future replication will be done mainly by national experts and institutions that will gain experience with project activities during implementation. The enhanced baseline and monitoring data, as well as experience gained from piloting the methods for participatory management, scientific data collection and implementation of management plans will help Tunisian professionals replicate the activities at lower cost than in the pilots. Further, the project's successes will provide incentives for other regions in Tunisia and other countries that protection of biodiversity can be replicated and sustainable by relying on national human resources.

2. Critical Risks (reflecting the failure of critical assumptions found in the fourth column of Annex 1):

Risk	Risk Rating	Risk Mitigation Measure
From Outputs to Objective		
Late start to form the local development committees, and insufficient facilitation by regional authorities for public participation for each pilot site.	M	Form the local development committees in first six months of project, and support them with training through Component 2 (that also starts in first year of project) and professional staff support from the POU.
Staff appointed to the PMU and POU have insufficient skills and experience to efficiently supervise the project activities and work across disciplinary sectors.	H	Component 2 includes training of project staff at the PMU and POU for building project management skills, team work and outreach for public participation
Inconsistent high level Government	M	The national level Steering Committee

support for the executing agency (PMU), and for long-term biodiversity sustainability and replication. Procurement procedures are carried out slowly and delay project implementation	 H	coordinates policy level decisions, which is chaired by the Minister of MEDD (or his delegate). Full-time procurement specialist at the PMU for two years and technical assistance by internationally experienced experts.
From Components to Outputs Late or insufficient co-financing from Government budget funds and the financial management procedures delay disbursements and delay progress on key activities and key performance indicators.	M	The budgets for Government co-financing are already included in the project procedures manual, as are the procedures for approval of invoices and withdrawals from the special account and other financial management procedures.
Overall Risk Rating	M	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N(Negligible or Low Risk)

3. Possible Controversial Aspects:

No controversial aspects at this time

G. Main Conditions

1. Effectiveness Condition

None.

2. Other [classify according to covenant types used in the Legal Agreements.]

The Recipient shall within six (6) months following the effectiveness of this Agreement, establish and thereafter maintain, throughout the duration of the Project, Local Development Committees in form and with functions satisfactory to the Bank, within each Pilot Site with a view to ensuring the participation of local communities and stakeholders in the development and implementation of biodiversity management plans for each pilot site with a biodiversity management plan.

A biodiversity management plan shall be submitted for each pilot site to the Bank for its review and approval. No work shall be carried out on a pilot site unless the Bank shall have first approved the biodiversity management plan prepared for that site.

H. Readiness for Implementation

☐ 1. a) The engineering design documents for the first year's activities are complete and ready for the start of project implementation.
☒ 1. b) Not applicable.

☐ 2. The procurement documents for the first year's activities are complete and ready for the start of project implementation.
☒ 3. The Project Implementation Plan has been appraised and found to be realistic and of satisfactory

quality.

☐ 4. The following items are lacking and are discussed under loan conditions (Section G):

I. Compliance with Bank Policies

☒ 1. This project complies with all applicable Bank policies.

☐ 2. The following exceptions to Bank policies are recommended for approval. The project complies with all other applicable Bank policies.

Allan Rotman	Vijay Jagannathan	Theodore O. Ahlers
Team Leader	**Sector Manager/Director**	**Country Manager/Director**

Annex 1: Project Design Summary

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

Hierarchy of Objectives	Key Performance Indicators	Data Collection Strategy	Critical Assumptions
Sector-related CAS Goal: Ensuring that social and environmental concerns are properly addressed, within context of improved competitiveness of Tunisian economy - CAS Outcome 1.4, Objective 1)	**Sector Indicators:** Outcomes influenced for efficiency and sustainability of the tourist, urban and agricultural sectors (CAS Annex 1 - Results Matrix)	**Sector/ country reports:** Annual reports for 10th Plan CAS Completion Report in 2008	**(from Goal to Bank Mission)** Macro-economic and political conditions remain favorable to maintain national budget allocations for biodiversity conservation and sustainable management of natural resources.
GEF Operational Program: Operational Program No.2: Coastal, Marine and Freshwater Ecosystems.	**Outcome / Impact Indicators:** Contributes to conservation of globally important biodiversity conserved and/or used in a sustainable manner	Surveys using the Management Effectiveness Tracking Tool (World Bank/WWF-May 2003).	

Hierarchy of Objectives	Key Performance Indicators	Data Collection Strategy	Critical Assumptions
Global Objective: **Project Development Objectives**	**Outcome / Impact Indicators:**	**Project reports:**	**(from Objective to Goal)**
Establish a functional integrated monitoring and participatory management system for the project area to manage biodiversity degradation in the Gulf of Gabès region.	1. A system for integrated and sustainable management of biodiversity resources established by 2010 as measured by: ● Biodiversity management plans implemented for 3 pilot areas and plans prepared for 3 additional pilot areas with participation in a satisfactory manner. ● Upward trend in the cumulative scores using: "Management Effectiveness Tracking Tool" and "Score Card" to Asses Progress in Achieving Management Effectiveness for Marine Protected Areas." ● One long-term strategy for an integrated approach to biodiversity protection is prepared that addresses scientific, social and economic issues, including replication of Biodiversity Management Plans. ● Necessary resources (i.e. human, financial institutional and infrastructure) included in 11th and 12th National Plans.	See project reports for outputs under Components 1, 2 and 4.	The Government continues to implement major investments to control urban and industrial pollution, so as to protect water quality for the Gulf of Gabès. The Government undertakes other poverty-reduction and development measures in regions around the pilot sites in order to disseminate project effects. The Government continues to implement a policy of biodiversity protection and responsible management of natural resources. Government supports activities for the Gulf of Gabès in the annual budgets for participating partner agencies.
	2. A system for timely and reliable monitoring of biodiversity resources established by 2010 as measures by: ● Baseline data collected and key indicators for marine fish species and habitats identified. ● Baseline data collected and key indicators for water quality identified. ● Scientific monitoring reports on trends for key indicators for two years.	See project reports for outputs under Component 3.	
Output from each Component: **Component 1: Strengthening of the institutional framework**	**Output Indicators:**	**Project reports:**	**(from Outputs to Objective)**

Result: (i) An efficient project management structure is operational at local and regional levels; (ii) a strategy to strengthen institutional framework to effectively manage marine and coastal biodiversity resources in the Gulf of Gabès in the long-term.	**Key Project Indicators** **Number of PMU and POU staff in place - *semi-annual reports*** **Fiduciary reports submitted - *procurement plan updated and financial audit annual basis*** **Long-term strategy for sustainability, including replication plans - *completed one year before project closure***	Terms of reference and requests for proposal are prepared early in Year 1. Requests for proposals for services and bid invitations for equipment issued. All equipment for all four partner agencies is purchased and delivered within year 1 and 2 of the project. The national level Steering Committee meets annually to review project progress and plan for long-term resources to support biodiversity. The national level Management Committee that monitors the project agreement among the partner agencies meets 3-4 times per year to monitor coordination and project progress. The national level PMU submits 2 reports per year on key project monitoring indicators to the World Bank. Quarterly and annual activity reports; Audits. Compliance with disbursement and payment forecasts.	Staff appointed to the PMU have sufficient skills and full- time status to efficiently carry out their functions properly, and the skills are strengthened through training under Component 2. All staff are appointed early in the project (in first 6-12 months). Tunisian and World Bank procurement procedures can be efficiently carried out by the implementing agency.
Component 2: Training, capacity-building and dissemination			
Result: Decision-makers at national and regional levels, government officials, local authorities, NGOs, target communities and other stakeholders receive training in biodiversity management, and participate actively in capacity-building workshops.	**Key Project Indicators** **Number of training sessions carried out and number of attendees - *semi-annual reports*** ***Report detailing satisfactory participation of stakeholders semi-annual report***	Terms of reference and requests for proposals are prepared early in Year 1. Preparation of training programs is finalized by the end of Year 1. Quality of training agendas and training manuals. Evaluation reports for training and awareness sessions. All staff directly involved in the project have been trained by the end of Year 2 Participatory mechanisms are finalized and validated at the end of Year 1. Communication materials for public awareness education material produced (e.g. posters, advertising, radio and TV spots) Socio-economic surveys are completed by the end of Y1.	Target groups participate in training programs, and training programs carried out satisfactorily.

		All members of the Local Development Committees have been trained by the end Year 2. Number of awareness campaigns and local stakeholders participating in project activities.	
Component 3: Baseline data acquisition and applied biodiversity monitoring			
Result: Precise and up-to-date scientific, indicators are used to monitor biodiversity in the Gulf of Gabès.	**Key Project Indicators** **Baseline key indicator marine fish species and habitats identified (native and alien) - *annual reports for first two years*** **Baseline key water quality indicators identified - *annual reports for first two years*** **Scientific monitoring reports on trends for key indicators submitted - *annual reports after first two years***	Terms of reference and requests for proposals are prepared early in Year 1. Contracting agreements made with scientific consultants, engineering companies, and independent experts. Establishment of new routine biodiversity and water quality inventory/ monitoring programs are started at the beginning of the Y2. Hydrodynamic and sedimentary studies are completed by the end of year Y3, enabling monitoring measures to be implemented in years Y4 and Y5. Inventories of the density and distribution of key habitats (e.g keystone species and alien species) at the management sites are defined at the end of Y2 and variations are monitored thereafter. The study phase on the effects of the fishing fleet on biodiversity is completed by mid-Y3. The recommendations for changes to fishing practices to create a biodiversity protection through responsible fishing techniques are completed by the end of Y3, and can be used for monitoring during Y4 and Y5. The regional strategy to address alien species originating from ballast water is completed by the end of Y3.	Equipment for the field studies, particularly in the marine environment is available from INSTM or can be easily leased/rented from private suppliers.
Component 4: Participatory biodiversity management plans and mainstreaming of biodiversity protection			
Result: Six plans are prepared and three pilot plans are implemented for the integrated management of marine and coastal biodiversity at	**Key Project Indicators** **Number of satisfactory management plans completed**	Terms of reference and requests for proposals are prepared early in Year 1.	Financial support by the Government of Tunisia for the executing agency, and for long-term biodiversity monitoring with the other

priority sites in the Gulf of Gabès, based on participatory principles that can be replicated at other points on the Tunisian and Mediterranean coasts.	**(goal is 6 plans) - *annual reports*** **Number of management plans satisfactorily implemented during the project period (goal is 3 plans) - *annual reports*** ***Number of local development committees formed (goal is 6) semi-annual reports*** **Baseline significant *posidonia* (sea grass) areas identified - *annual reports for first two years*** **Cumulative scores for using: "Management Effectiveness Tracking Tool" and "Score Card to Assess Progress in Achieving Management Effectiveness for Marine Protected Areas" - *annual reports*** **Specific report on the participatory approach program and methodology for preparation of management plans.** Local NGOs and the target communities are involved in the plans, after receiving the awareness and training programs (see Component 2). Preparation of 3 management plans is completed during Y2. Posidonia sea grass beds are mapped at the end of Y3. Management plans for the Bou Ghrara, Kneiss Island and the sea grass pilot sites are operational in Y3. Construction of the visitor center at Bou Ghrara completed by mid-Y4. Reaching of a concession agreement for ecotourism management of Bou Ghrara. Construction of bird-watching structures on the Kneiss Islands completed by mid-Y4. Number of visitors to each managed site under implementation. Anti-trawling blocks and artificial reefs are installed in the sea grass pilot area. The GIS is operational at the Information Exchange Service by mid-Y2 .	government agencies associated with the project (e.g. INSTM, CITET, Coast Guard, etc). The local development committees are formed early in the project (first year), and the committees are supported by regional administrative authorities and the POU for each pilot site.

Hierarchy of Objectives	Key Performance Indicators	Data Collection Strategy	Critical Assumptions
Project Components / Sub-components:	**Inputs: (budget for each component)**	**Project reports:**	**(from Components to Outputs)**
Activities of Component 1	Total US$: 3.94 million		
1.1. Project Management Unit (PMU) is set up, with purchase of equipment. Staffing for PMU and partner agencies takes place in 1st year of implementation. The Steering Committee and the Monitoring Committee for the agreement among the partner agencies is set up at the national level. 1.2. Quality assurance activity is staffed with specialized technical experts and meets regularly throughout the duration of the project. 1.3. Long-term strategy activity is completed; this activity defines the institutional and technical resources to support the biodiversity management plans over the long-term. 1.4 Strategic Environmental Evaluation (SEE) is completed for the Tourist Development Plan for the Gulf of Gabès. 1.5 Strategy to protect biodiversity areas from accidental petroleum and chemical spills for the Gulf of Gabès is completed. 1.6 Baseline inventories of terrestrial fauna and flora are carried out.		5-year budget forecast plan (updated annually). Annual plan of activities of the Project Management Unit (PMU). Financial reports; Audits; Minutes of meetings. Project Operations Manual is regularly updated (maximum every 18 months). Procurement Plan is updated regularly (maximum every 18 months).	Financial management and procurement procedures are sufficiently compatible with World Bank procedures so as to not delay project activities and disbursements.
Activities of Component 2	Total US$: 1.35 million		
2.1. Training program for technical and project management skills for project staff and high-level management level staff.		PMU activities reports; Terms of Reference	Training and public participation activities are started early.
2.2. Public awareness program for target communities, local communities, concerned interest groups and all other stakeholders - prepared and implemented.		Activity monitoring; documents relating to training modules; educational material produced, dissemination workshop proceedings.	
2.3. Capacity building to strengthen enforcement of biodiversity protection in regulations - prepared and implemented.			

2.4. Socio-economic surveys of target populations and other stakeholders. 2.5 Participatory tools and mechanisms - prepared and integrated into preparation of management plans.			
Activities of Component 3	Total US$: 1.20 million		
3.1. Hydrodynamic and water quality studies are undertaken for the Gulf and Jerba-Zarzis area. 3.2 Inventory and monitoring of lagoon and marine species with regional and international significance. 3.3 Inventory and monitoring of alien species and their distribution within the Gulf of Gabès. 3.4 Regional ballast water management strategy to address alien species is prepared for the Gulf of Gabès. 3.5 Identification of biodiversity impacts caused by the fishing fleet, monitoring of impacts within and adjacent to sea grass pilot area, and recommended changes to fishing practices .		PMU activities reports; Terms of Reference Invitations to tender; Activity monitoring; Acceptance of technical reports	Scientific experts are able to adapt appropriate inventory and monitoring techniques to the project objectives
Activities of Component 4	Total US$ 3.32 million		
4.1. A generic methodology for a biodiversity management plan is prepared and validated. 4.2. Preparation and implementation of the management plan for the sea grass area; suitable site for the sea grass pilot area is delineated; and		PMU activities reports; Terms of Reference Invitations to tender; Activity monitoring; Acceptance of works	Commitment by all key stakeholders to effectively participate in the planning and implementation of the management plans for six pilot sites

anti-trawling structures are built. 4.3. Baseline inventory and mapping of the most significant Posidonia sea grass beds and marine plant cover in the Gulf of Gabès. 4.4. Monitoring network for Posidonia sea grass of the most significant formations - monitoring procedures established and implementation. 4.5. Preparation and implementation of the management plan for the Gulf of Bou Ghrara. 4.6. Preparation and implementation of the management plan for the Kneiss Islands. 4.7 Preparation of the management plan for the Lagoon (Bahiret) El Bibane. 4.8. Preparation of the management plan for the Kerkennah Islands. 4.9. Preparation of the management plan for the Gabès Oasis. 4.10 GIS and Information Exchange Center.		Printing and dissemination of technical reports and Biodiversity of Management Plans.	

Annex 2: Detailed Project Description

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

The Project consists of four main components. The cost of implementing this project is estimated at *US$ 9.81 million* of which *US$ 6.31 million* would be funded by the GEF.

By Component:

Project Component 1 : Institutional strengthening, strategic planning and dissemination. - US$3.94 million

The main activities for this component are:

(1) Project Management Unit, to be staffed by eight key full-time permanent employees from the Tunisian civil service; included in this activity is office equipment, equipment for the Information Exchange Center (e.g. Geographic Information System (GIS), map printers, digitizing platforms), basic field equipment (e.g. boat, motor, vehicles) and operating costs;

(2) Quality assurance and control for the project activities (i.e. scientific, technical and participatory planning activities); this quality assurance will be provided by short term technical assistance experts, and includes workshops to disseminate the interim and final results of activities;

(3) Long-term strategy for biodiversity conservation for the Gulf of Gabès region; this activity includes two synthesis workshops to disseminate the project results to scientific and technical groups at the within the Project and at the national, Mediterranean and international levels; this activity will incorporates lessons learned from other GEF projects and will include mechanisms for the replication of the Project activities;

(4) Strategic Environmental Evaluation (SEE) to evaluate impacts on biodiversity of the mid-to-long term Tourist Development Plan for the Gulf of Gabès; and

(5) Strategy to protect biodiversity areas from accidental petroleum and chemical spills.

(6) Inventories of terrestrial flora and fauna for the project region focussed on the 6 priority sites so as to prepare detailed baseline data for the management plans;

A detailed description of all Project activities has already been prepared during Project preparation. Each activity is described in the format of a terms of reference, with clear objectives, task descriptions, methodology and outputs. These terms of reference will be incorporated into an operations manual which will allow the PMU to quickly launch all the critical project activities within the first year of implementation. In addition during early implementation training will be provided to the PMU staff for both technical skills (e.g. preparation of participatory management plans; operational plans) and for project management skills to build implementation effectiveness.

Project Component 2 : Training and capacity-building. - US$1.35 million

The aim of this component is to strengthen human resources for technical, scientific and participation issues for biodiversity management in the Gulf of Gabès region. The component will consist of:

(1) Training for local stakeholders, Project staff (both part-time and full-time), and high level management staff on Mediterranean and international experience in marine and coastal biodiversity management, and in project management skills (e.g. financial management, procurement, progress monitoring, impact monitoring, etc); this activity will combine both classroom training and on-the-job training to ensure an efficient Project launch and an efficient implementation; the goal is to ensure a strong team approach across the stakeholders and the various Tunisian institutions to enhance the Project objectives;

(2) Design and implementation of a public awareness program for the target communities, local stakeholder groups and the general public concerned by the Project; this activity will include experience from the other on-going GEF projects in Tunisia;

(3) Training and capacity building program to strengthen enforcement of biodiversity protection in marine and coastal regulations; this activity is targeted at the staff from the agencies working in day-to-day enforcement of existing regulations for sectors such as fisheries, solid waste, small and large ports, customs, coastal and wetlands protection, international treaties, etc.

(4) Socio-economic surveys of the target populations and other stakeholder groups; and

(5) Participatory tools and mechanisms: this activity will identify and prepare implementation mechanisms to incorporate participation into the biodiversity management plans.

Project Component 3 : Baseline data acquisition and applied biodiversity monitoring. - US$ 1.20 million

The aim of this component is to update or acquire technical and scientific data required as basic inputs for the biodiversity management plans (see Component 4 below), and then to carry out monitoring of key impact indicators. The activities of this component include the following studies and inventories:

(1) Hydrodynamic and water quality studies for the Gulf of Gabès in general, and focussed on the Jerba-Zarzis area in particular;

(2) Inventory and monitoring of marine and lagoon species of regional and global interest; this will be carried out in parallel with the implementation of the management plans;

(3) Inventory and monitoring of alien species and their distribution within the Gulf;

(4) Regional management strategy to address ballast water and alien species; and

(5) Biodiversity impacts caused by the fishing fleet, including monitoring of impacts within and adjacent to the sea grass areas and recommended changes to fishing practices.

Project Component 4: Participatory Biodiversity Management Plans. - US$3.32 million

The main aim of this component is to prepare sustainable biodiversity management plans for the six pilot areas, and implement the plans for the chosen three priority areas. All the plans will be prepared based on a participatory approach. This component includes:

(1) General methodology for the participatory biodiversity management plans, for implementation within the existing Tunisian legal framework;

(2) Preparation and implementation of the biodiversity management plan for the sea grass area; the experimental area for immediate implementation is located in the close vicinity of the Kerkennah Islands; the installation of anti-trawling structures and artificial reefs is included in the experimental and full-scale implementation of this activity;

(3) Inventory and mapping of the marine plant cover, including *Posidonia* sea grass beds, to follow-up on the gaps and intensity of sampling from existing baseline data;

(4) Monitoring network for sea grass beds in parallel with implementation of the management plans;

(5) Implementation of the biodiversity management plan for the Gulf of Bou Ghrara; this activity includes the construction of a visitors center;

(6) Implementation of the biodiversity management plan for the Kneiss Islands; this activity includes the construction of bird observation platforms;

(7) Preparation of a biodiversity management plan for the El Bibane lagoon;

(8) Preparation of a biodiversity management plan the Kerkennah Islands; and

(9) Preparation of a biodiversity management plan for the Gabès Oasis.

(10) Geographical Information System (GIS) to serve as a data base for the Information Exchange Center which is functionally linked to the PMU; this activity will gather all existing technical, scientific and social information concerning the Gulf of Gabès, set up user friendly filing (archiving) system and maintain regular updates on Project activities, as well as coordinate with existing information services (e.g. *Observatoires*) of Ministries in Tunisia;

The preparation of the management plans for the Kerkennah Islands, El Bibane lagoon, and Gabès Oasis, will be based on lessons learned from the first three management sites. The implementation of these latter three management plans will be financed by the Government, and already measures are underway to assure financing mechanisms.

Annex 3: Estimated Project Costs

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

Project Cost By Component	Local US $million	Foreign US $million	Total US $million
Component 1: Institutional Strengthening, Strategy and Dissemination	2.57	1.37	3.94
Component 2: Training and Capacity Building	0.09	1.26	1.35
Component 3: Baseline Marine Data Acquisition and Applied Biodiversity Monitoring	0.22	0.98	1.20
Component 4: Participatory Biodiversity Management Plans	0.62	2.70	3.32
Total Baseline Cost	3.50	6.31	9.81
Physical Contingencies	0.00	0.00	0.00
Price Contingencies	0.00	0.00	0.00
Total Project Costs[1]	3.50	6.31	9.81
Total Financing Required	3.50	6.31	9.81

[1] Identifiable taxes and duties are 0 (US$m) and the total project cost, net of taxes, is 9.81 (US$m). Therefore, the project cost sharing ratio is 64.32% of total project cost net of taxes.

Annex 4 Incremental Cost Analysis

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

Background

The coastal zone of Tunisia is extremely rich in terms of species and habitats, and this is particularly true of the Gulf of Gabès region. However for several decades this region has experienced three major direct threats to biodiversity:

- industrial pollution, and especially the discharge of phospho-gypsum effluents into the Gulf,
- fisheries over-exploitation, particularly the use of fishing equipment that impacts sea grass beds and a general decline of harvests for near-shore fisheries,
- urban and tourism development; although this is a high value economic benefit for the country, the development of infrastructure along the coast has already upset the fragile balance of this zone.

The Tunisian Government has already made enormous financial efforts to reduce urban and industrial sources of pollution to a reasonable level. The fact that nearly 80% of the population in the three Governorates in the project area is concentrated along the coastal strip indicates that even greater pressure will be brought to bear on natural resources in the future.

Conflicts of use between users are likely to grow in the near future due to the progressive shrinking of usable resources. This may exacerbate the falling incomes of the coastal population who rely on marine resources for their livelihoods. Thus, sites of exceptional biodiversity that are still barely affected today could quickly be degraded in the coming years.

The aim of this project is to address the indirect biodiversity threats by setting up sustainable management methods for marine and coastal resources. The goal of the management plan is to introduce methods in pilot areas that protect global biodiversity, and at the same time contribute to the incomes of local people.

Baseline Scenario

Within the 10th National Plan of Tunisia for Economic and Social Development (2002-2006), the major environmental protection investments are categorized within municipal infrastructure. The overall investment plan is US$ 36.3 billion, as summarized below:

Total Investment under the 10th National Plan (2002-2006):

(Amounts in millions US$)

Sector	*Amount*	*Proportion*
Agriculture and fisheries	3 731	10.3%
Manufacturing industries	5 304	14.6%
Non-manufacturing industries	4 465	12.3%
Services	18 985	52.3%
Municipal infrastructure	3 823	10.5%
Total	36 308	100.0%

Source: 10th Plan for Economic and Social Development

The investment planned for the environmental protection sector amounts to US$2.1 billion. This represents 5.5 % of the overall investments under the 10th Plan or 56.5 % of the budgets allocated to the municipal infrastructure sector. The breakdown of investments for environmental protection described by type of investment project is presented in the following table:

Breakdown of environmental protection investments - 10th Plan:

(Amounts in millions US$)

	Committed Old Projects (Note 1)		**New Projects (Note 2)**		**Total**	
	Amount	*Proportion*	*Amount*	*Proportion*	*Amount*	*Proportion*
Wastewater collection and treatment	355.9.	43.6%	460.4.	56.4%	816.3.	39.8%
Municipal environmental protection	20.1.	14.8%	116.1.	85.2%	136.3.	6.6%
Solid waste disposal in sanitary landfills	75.5.	51.0%	72.7.	49.1%	148.1.	7.2%
Urban environment and city beautification	6.2.	10.8%	51.6.	89.2%	57.8.	2.8%
Industrial pollution control	61.6.	30.7%	139.2.	69.3%	200.7	9.8%
Protection of coastal and marine areas	39.8.	25.0%	119.5.	75.0%	159.3.	7.8%
Protection of natural habitats and rural zones	10.4.	29.4%	25.1.	70.6%	35.6.	1.7%
Environmental inspection and enforcement	2.5.	12.6%	17.5.	87.4%	20.0.	1.0%
Training, public awareness and research	5.8.	10.1%	51.3.	89.9%	57.0.	2.8%
Renewable energy	77.8.	18.5%	343.0.	81.5%	420.7.	20.5%
Total	**655.6.**	**31.9%**	**1 396.3.**	**68.1%**	**2 051.9.**	**100.0%**

Source: 10th Plan for Economic and Social Development (third phase), Report of the Sector Commission for Land Use Planning and Environmental Protection, Ministry of the Environment and Land Use Planning, September 2001.
Note 1: Committed Old Projects: Projects identified and/or started during the 9th Plan and continued during the 10th Plan.
Note 2: New Projects: Projects in the 10th Plan

The new projects included under the 10th Plan in the Sector for coastal zone and marine protection are the following:

New projects for coastal and marine protection - 10th Plan:

(Amounts in million of US$)

		Total Cost	***10th Plan***
		US$ million	US$ million
APAL	National program for protection against coastal erosion	50.1	19.8
APAL	Coastal Observatory (public information dissemination center)	1.1	1.1
APAL	Protection of sensitive ecological areas in coastal zones	22.7	17.5
APAL	Coastal promenades	2.1	2.1
APAL	Rehabilitation of coastal lakes and salt marshes	312.0	75.0
APAL	Biodiversity	3.8	2.5
INSTM	Protection of sensitive ecological areas in coastal zones	1.5	1.5
Total		**393.3**	**119.5**

Source: 10th Plan for Economic and Social Development (third phase), Report of the Sector Commission for Land Use Planning and Environmental Protection, Ministry of the Environment and Land Use Planning, September 2001.

This Project will act as a catalyst for all levels of decision-makers to invest in additional incremental activities for biodiversity protection. The 6 management sites will demonstrate that the management of biodiversity can be sustainable and contribute to long-term revenues for the communities concerned. The project is organized around four (4) components:

- Institutional strengthening, strategic planning and dissemination
- Training and capacity-building
- Baseline data acquisition and applied biodiversity monitoring
- Participatory biodiversity management plans

The baseline scenario contains all the Government's activities and programs in the sectors of environmental protection and management for the Gulf of Gabès region. The following table presents the different activities planned or currently in implementation based on meeting two criteria:

(i) activities located in the project area, and

(ii) activities linked to the four project components or having a component in common with one of the relevant activities described above.

The baseline scenario is estimated at US$ 279 million with a breakdown related to each project component as summarized below:

Summary of the Baseline Scenario:

Project Component:	***1000 DT***	***1000 $US***	***Proportion***
1: Institutional strengthening, strategic planning and dissemination	54 632	40 468	14.5%
2: Training and capacity-building	54 652	40 483	14.5%
3: Baseline data acquisition and applied biodiversity monitoring	109 200	80 889	29.0%
4: Participatory Biodiversity Management Plans	158 000	117 037	42.0%
Total	**376 483**	**278 876**	100.0%

Baseline Scenario: Breakdown by Governorate and by Activity (‘000 DT and ‘000US$)

Governorate		Total Cost		Source
Component:	Activities	1000 DT	1000 $ US	
Sfax				
4	Coastline protection of Kerkennah against erosion	300	222	Regional preparation report for the 10th Plan
3	Management of the sensitive zone of Kneiss Islands	87	222	APAL, project information form
4	Rehabilitation of the southern coastal shoreline	50	64	Regional preparation report for the 10th Plan
3	Master land use plan for management of the northern coastal zone	80	37	Regional preparation report for the 10th Plan
3	Site relocation study for phospho-gypsum industrial plants	50	59	Regional preparation report for the 10th Plan
3	Management plan for the adjacent urban zone of Sfax	50	37	Regional preparation report for the 10th Plan
3	Phyto-ecological maps	10	37	Regional preparation report for the 10th Plan
3	Regional Agenda 21	50	7	Regional preparation report for the 10th Plan
3	Agenda 21 for-Kerkennah)	50	37	Regional preparation report for the 10th Plan
0	Sanitary landfills	6 000	37	Regional preparation report for the 10th Plan
0	Solid waste treatment center	2 000	4 444	Regional preparation report for the 10th Plan
0	Taparura project (de-pollution or clean-up component)	80 000	1 481	MAERH, Direction for de-pollution industrielle
0	Wastewater collection and treatment projects	52 000	59 259	MDCI
	Total Goveronate of Sfax	140727	104 242	
Gabès				
4	Project for the ecologically sensitive area for the oasis of Gabès	11 600	8 593	Regional preparation report for the 10th Plan
0	Wastewater collection and treatment projects	28 200	20 889	Regional preparation report for the 10th Plan
0	Protection of the coastal zone and municipalities	12 000	8 889	Regional preparation report for the 10th Plan
0	Project for de-pollution of the phospho-gypsum plant at Gabes	120 000	88 889	MAERH, Direction for de-polution industrielle
	Total Goveronate of Gabès	171 800	127 259	Regional preparation report for the 10th Plan
Médenine				APAL, project information form
4	Ecologically sensitive areas of Beïn Widen and Ras Rmal	1 380	1 022	Regional preparation report for the 10th Plan
4	Protection of the East coastline of Djerba	586	434	Regional preparation report for the 10th Plan
3	Agenda 21 - Djerba Médenine	20	15	Regional preparation report for the 10th Plan
3	Photo-ecological maps for coastal zones	50	37	Regional preparation report for the 10th Plan
3	Protected areas in wetland areas (Sabakh El Jalabia, El Mjesser and Wadi El Khajel)	20	15	Regional preparation report for the 10th Plan
3	Protected areas (Beni Khadech and Zarzis)	20	15	Regional preparation report for the 10th Plan
3	Study on desertification in Bou Ghrara region	20	15	Regional preparation report for the 10th Plan
0	Wastewater collection and treatment projects	35 610	26 378	Regional preparation report for the 10th Plan
0	Controlled landfill for Djerba and 2 collection centers	5 000	3 704	Regional preparation report for the 10th Plan
0	Controlled landfill for Médenine and 1 collection center	3 000	2 222	Regional preparation report for the 10th Plan
0	Protection of the coastal shoreline for North-East Djerba	11 000	8 148	Regional preparation report for the 10th Plan
0	Protection of Aghir against coastal erosion	5 400	4 000	APAL, project information form
	Total Goveronate of Médenine	62 106	46 004	
Regional Activities for Several Governorates				
	Base budget for Institutional strengthening of the public			
1	services in three goveronates	600	444	Estimate on basis of national data
2	Training and public awareness for biodiversity	620	459	CITET Program (5% of training budget)
3	Inventory of pollution sources on the coast	130	96	APAL, project information form
3	Study of terrestrial vegetation cover	200	148	Regional preparation report for the 10th Plan
3	Studies on coastal and marine issues	300	222	Regional preparation report for the 10th Plan
	Total of Regional Activities	1850	1370	
Total				
Before distribution of the regional activities				
	Component 0 (regional activities component)	360 210	266 822	
	Component 1	600	444	
	Component 2	620	459	
	Component 3	1 137	842	
	Component 4	13 916	10 308	
	Total	**376 483**	**278 876**	
After distribution of the regional activities				
	Component 1	54 632	40 468	
	Component 2	54 652	40 483	
	Component 3	109 200	80 889	
	Component 4	158 000	117 037	
	Total	**376 483**	**278 876**	

GEF Scenario

The alternative proposed for GEF funding is based on and developed from this baseline scenario. The GEF scenario involves the sustainable development protection and management of 6 pilot sites that are unique to the Mediterranean in terms of the habitats and species. This will improve scientific knowledge of the Gulf of Gabès, increasing scientific knowledge to improve management and monitoring of ecosystem health. It will also involve the setting up of a management and documentation center that will provide essential information for understanding the biodiversity environment and management measures necessary to ensure sustainable development of the coastal ecosystem environment. By mapping and monitoring critical ecosystems and species (e.g. seagrass inventories, mapping and monitoring), the Project will provide essential information on ecosystem health and identify management of interventions necessary to ensure sustainable development in the coastal zone. This project will pilot ways to mainstream biodiversity issues into development sectors (e.g. tourism) in which the Government invests heavily but for which sustainability benefits are still largely unknown.

Throughout the Project area and at all levels ranging from small coastal communities to large Government institutions, the GEF scenario involves specific training and awareness activities aimed at improving the conservation and sustainable use of biodiversity. The GEF will increase collective awareness of the need for and benefits from biodiversity protection and instill in stakeholders a more responsible attitude, which is a prerequisite for sustainable management of the natural environment.

The total cost of the GEF scenario is estimated at US$ 288.69 million, as set out in the table below. The difference between this baseline scenario (US$ 278.88 million) and the GEF scenario represents the additional cost of the project, i.e. US$ 9.81 million.

The Government would co-finance part of the additional cost (US$ 3.50 million), and is thus requesting a GEF grant of (US$6.31million).

Summary of Incremental Costs

Component	*Category*	***Expenditure 000 US$***	***Benefits***
1. Strengthening of the institutional framework	Baseline scenario	40 468	See previous table
	GEF scenario	44 408	Creation of a sustainable organization, the main task of which is to preserve biodiversity in the region of the Gulf of Gabès.
	Additional Cost	**3 940**	
2. Training, capacity-building and dissemination	Baseline scenario	40 483	See previous table
	GEF scenario	41 833	Capacity-building for biodiversity management at national, regional, local and community levels.
	Additional Cost	**1 350**	
3. Baseline data acquisition and applied biodiversity monitoring	Baseline scenario	80 889	See previous table
	GEF scenario	82 089	Precise, up-to-date scientific knowledge of the Gulf of Gabès, enabling effective monitoring of effects produced by the project and better targeting of objectives.
	Additional Cost	**1 200**	
4. Biodiversity management plans and mainstreaming of biodiversity protection.	Baseline scenario	117 037	See previous table
	GEF scenario	120 357	Preservation and saving of natural marine and coastal resources in sensitive areas of the Gulf of Gabès, based on participatory principles that are capable of replication at other points along the Tunisian and Mediterranean coasts.
	Additional Cost	**3 320**	
Grand Total	Baseline scenario	278 876	
	GEF scenario	288 686	
	Total Additional Cost	**9 810**	

Annex 5: Financial Summary

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

Years Ending
December 2009

	IMPLEMENTATION PERIOD						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Total Financing Required							
Project Costs							
Investment Costs	1.0	2.4	2.4	1.1	0.4		
Recurrent Costs	0.5	0.5	0.6	0.4	0.5		
Total Project Costs	1.5	2.9	3.0	1.5	0.9	0.0	0.0
Total Financing	1.5	2.9	3.0	1.5	0.9	0.0	0.0
Financing							
IBRD/IDA							
Government	0.6	0.8	1.0	0.6	0.5		
Central							
Provincial							
Co-financiers							
GEF Grant	0.9	2.1	2.0	0.9	0.4		
Total Project Financing	1.5	2.9	3.0	1.5	0.9	0.0	0.0

Main assumptions:
Data in US$ millions
Assume effective date of May 2005

Annex 6(A): Procurement Arrangements

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

Procurement

1. Guidelines

Procurement for the proposed project will be carried out in accordance with the World Bank "Guidelines: Procurement under IBRD Loans and IDA Credits" May 2004, and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers", May 2004, and the provisions stipulated in the Grant Agreement. National Competitive Bidding (NCB) will be carried out with procedures acceptable to IBRD which allow: (a) an explicit statement to bidders of the evaluation and award criteria; (b) national advertising with public bid opening; (c) sufficient time for bidders to submit bids (a minimum of thirty days); (d) no preference margin to domestic contractors; (e) foreign bidders to participate in NCB if they so wish; and (f) contract award to be made to the qualified bidder whose offer is substantially responsive and lowest evaluated. The methods to be used for the procurement under this project, and the estimated amounts for each method, are summarized in Table A. The threshold contract values for the use of each method are fixed in
Table B.

Overall, the Tunisian procurement legislation for goods and works is in line with the Bank's guidelines and reflects adequate capacity of implementing agencies to handle procurement, and adequate control organizations in the country. However, substantial divergencies exist in the procedures for the selection and employment of consultants which, following local legislation, are based on open competitive bidding. Under the project, Tunisian implementing agencies would apply the Bank's procedures.

2. NCB Provisions and Conditionalities

Except in the cases provided for below, goods and works shall be procured under contracts awarded on the basis of paragraphs 3.3 and 3.4 of the guidelines and paragraphs below.

Contracts of goods and works procured under the National Competitive Bidding procedure shall comply with the following:

(i) any prospective bidder from a country eligible under the Guidelines who proposes to provide goods produced in or services supplied from any such country shall be eligible to bid for such contracts;

(ii) Tenders will be advertised with no less that twenty-eight (28) days for bid preparation;

(iii) Government-owned enterprises in the Beneficiary's country may participate only if they can establish that they (i) are legally and financially autonomous, and (ii) operate under commercial law. No dependent administrative agency of the Beneficiary or sub-Beneficiary shall be permitted to bid or submit a proposal for the procurement of goods or works under the Project;

(iv) Bidders will be allowed to deliver their bid by hand or by mail;

(v) Bids shall be opened in public; that is, bidders or their representatives shall be allowed to be present. The time for the bid opening shall be the same as for the deadline for receipt of bids or promptly thereafter; and shall be announced, together with the place for bid opening, in the invitation to bid;

(vi) Prospective bidders shall be allowed to submit two envelopes provided the two envelopes are

opened at the same time;

(vii) Bids shall be evaluated based on price and on other criteria disclosed in the bid documents and quantified in monetary terms, and no provision for preferential treatment for national companies shall be applied;

(viii) The contract shall be awarded to the bidder having submitted the lowest evaluated responsive bid, and no negotiation shall take place; and

(ix) The procedures shall include publication of evaluation results and the award of contract and provisions for bidders to protest.

These provisions are also specified in Schedule 3 of the Grant Agreement.

3. Project Management

DGEQV of MEDD would be the principal agency responsible for overall coordination of procurement under the project and for the procurement of goods and services required under Component 1, Institutional Strengthening. However, the partner agencies, CITET, INSTM and APAL, will through signed conventions be responsible for the procurement of works, goods and services covered under the convention. These agencies have limited experience in implementing Bank-supported projects and a very limited complement of staff dedicated to procurement, often combined with administrative and financial functions. The PMU of DGEQV will include a procurement specialist, full time for the first two years of the project, supported by international TA for about five months to coordinate and assist the partner agencies in the preparation of bidding documents and requests for proposals for consultants' services.

4. Assessment of DGEQV and partners' capacity to implement procurement activities

An assessment of the procurement capacity of DGEQV and the three participating agencies, CITET, INSTM and APAL, was carried out during pre-appraisal, and is filed in the project documents. The result of the analysis indicate an overall HIGH procurement risk, given the high proportion of consultants' services to be procured (about US$5.0 million, or more than 60% of total project costs), the limited exposure of these agencies to the Bank's consultants guidelines and the limited availability of procurement dedicated staff. In addition to the procurement specialist and the TA mentioned above, the project includes training on procurement in Bank assisted project as part of the overall training program already planned for project staff under Component 2 of the project.

5. Civil Works

Civil works to be financed under the project will cover mainly the construction and installation of artificial reefs, underwater structures to prevent dragnet fishing, and the construction of simple buildings like visitors' centers and observatories. These contracts are expected to add up to an aggregate of US$ 1.48 million equivalent. All Civil works contracts will be awarded on the basis of National Competitive Bidding (NCB) procedures, subject to the provisions listed in para 2 above, and the use of sample bidding documents acceptable to the Bank.

6. Goods

The project would finance vehicles, office equipment, computers, miscellaneous equipment for the implementing units and for baseline data acquisition and applied biodiversity monitoring. The total value

of goods is estimated at US$0.40 million equivalent. NCB may be used for contracts estimated to cost US$30,000 or more, while National or International shopping based on price quotations obtained from a minimum of three suppliers can be used for small quantities of goods, provided that the value of the goods does not exceed US$30,000 and the aggregate amount does not exceed US$200,000. Proprietary software and satellite imagery may be procured on a Direct Contracting (single source) basis in an aggregate amount not exceeding US$100,000 equivalent.

7. Services

Services will consist of approximately US$5.0 million of studies, technical assistance and training. Training is estimated at approximately US$1.2 million, and the remaining US$3.8 million equivalent consist of national and international consultants. Consultants' Services with an estimated contract amount exceeding US$200,000 will be advertised in the United Nations Development Business and in at least one national paper, seeking expressions of interest. For such contracts the Bank's Standard Request for Proposals (SRP) will be used , and the selection of consultants will be addressed through competition among qualified short-listed firms in which the selection will be based on Quality and Cost Based Selection (QCBS). In the case of assignments to cost less than US$200,000 equivalent, the short list of consultants may comprise entirely national consultants if a sufficient number of qualified firms are available at competitive costs. However, if foreign firms express interest, they will not be excluded. The selection method will be based on quality and cost (QCBS) for all contracts above US$200,000 equivalent for firms. The selection methods for contracts estimated to cost more than US$100,000, but less than US$200,000 equivalent will be either Quality Based Selection (QBS) or based on Consultants' Qualifications. Below these thresholds, and with the exception of the employment of consultants through single source for reasons critical to the project, the selection method may be on the basis of Consultants' Qualifications. Individual consultants will be selected and employed in accordance with paragraphs 5.1 to 5.4 of the Guidelines. The need for Sole Source contracts is not anticipated but, if justified, they will be awarded in accordance with the provisions of paragraphs 3.9, 3.10, 3.11, 3.12 and 3.13 of the Guidelines. A particular case of Sole Source contract is planned in relation to items (3) and (4) of Component 4 - Inventories and mapping of the marine plant cover and the establishment of a Monitoring network for grass beds. The studies will require the use of sonar equipment, not available in Tunisia to private operators because of its strategic applications, and DGEQV has recommended to contract the study to INSTM, because of its unique and exceptional qualifications, pursuant to Paragraph 1.11 (c) of the Guidelines.

National Consultants Shortlisting Ceiling: until further notice the ceiling for the National Consultants Shortlist will remain at US$200,000.

A project Operational Manual has been prepared and it includes procurement and financial procedures, as well a detailed procurement plan for the fist eighteen months' activities agreed at appraisal.

Procurement methods (Table A)

Table A: Project Costs by Procurement Arrangements
(US$ million equivalent)

Expenditure Category	Procurement Method[1]				Total Cost
	ICB	NCB	Other[2]	N.B.F.	
1. Works	0.00 (0.00)	1.48 (1.11)	0.00 (0.00)	0.00 (0.00)	1.48 (1.11)
2. Goods	0.00 (0.00)	0.20 (0.16)	0.20 (0.16)	0.00 (0.00)	0.40 (0.32)
3. Services	0.00 (0.00)	0.00 (0.00)	4.98 (4.48)	0.00 (0.00)	4.98 (4.48)
4. Miscellaneous	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Total	0.00 (0.00)	1.68 (1.27)	5.18 (4.64)	0.00 (0.00)	6.86 (5.91)

[1/] Figures in parentheses are the amounts to be financed by the Bank Grant. All costs include contingencies.

[2/] Includes civil works and goods to be procured through national shopping, consulting services of contracted staff of the project management office, training, technical assistance services, and incremental operating costs related to (i) managing the project, and (ii) re-lending project funds to local government units.

Table A1: Consultant Selection Arrangements (optional)
(US$ million equivalent)

Consultant Services Expenditure Category	Selection Method							
	QCBS	QBS	SFB	LCS	CQ	Other	N.B.F.	Total Cost[1]
A. Firms	3.62 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.48 (0.00)	0.41 (0.00)	0.00 (0.00)	4.51 (0.00)
B. Individuals	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.47 (0.00)	0.00 (0.00)	0.47 (0.00)
Total	3.62 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.48 (0.00)	0.88 (0.00)	0.00 (0.00)	4.98 (0.00)

[1] Including contingencies

Note: QCBS = Quality- and Cost-Based Selection
QBS = Quality-based Selection
SFB = Selection under a Fixed Budget
LCS = Least-Cost Selection
CQ = Selection Based on Consultants' Qualifications
Other = Selection of individual consultants (per Section V of Consultants Guidelines), Commercial Practices, etc.
N.B.F. = Not Bank-financed
Figures in parentheses are the amounts to be financed by the Bank Grant.

Prior review thresholds (Table B)

Table B: Thresholds for Procurement Methods and Prior Review[1]

Expenditure Category	Contract Value Threshold (US$ thousands)	Procurement Method	Contracts Subject to Prior Review (US$ millions)
1. Works Underwater Structures and Buildings	>=30<=200	NCB	All contracts >=0.1
	<30	NS	--
2. Goods	>30	NCB	Two first contracts
	<=30	IS/NS	Two first contracts
	<40	SS	All
3. Services Firms	>=200	QCBS	All contracts
	>100 <200	QBS/CQ	All contracts
	<=100	CQ	Two first contracts (per agency)
Individuals	>=50	Section V of Consultants Guidelines	Report on comparison of qualifications & experience, TOR and conditions of employment
	<50	Section V of the Guidelines	TOR only
4. Miscellaneous			
5. Miscellaneous			
6. Miscellaneous			

Total value of contracts subject to prior review: US$ 4.2 million

Overall Procurement Risk Assessment: **High**

Frequency of procurement supervision missions proposed: One every 6 months (includes special procurement supervision for post-review/audits)

[1] Thresholds generally differ by country and project. Consult "Assessment of Agency's Capacity to Implement Procurement" and contact the Regional Procurement Adviser for guidance.

Annex 6(B): Financial Management and Disbursement Arrangements
TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

Financial Management

1. Summary of the Financial Management Assessment

1.1 Overall financial management risk assessment and conclusion

The overall financial management risk is considered low in this project based on the appraisal mission. Two partner institutions (CITET and APAL) have prior Bank project implementation experience. The financial management assessment undertaken during the appraisal mission covered the Direction Générale de l'Environnement et de la Qualité de la Vie (DGEQV) and its three partner institutions (APAL, CITET and INSTM). Each institution has a well established tradition of financial management including: qualified financial management staff, accounting and reporting, internal control, and annual external audit arrangements in place. Overall each partner agency has an adequate system. The coordination for the financial management aspects is described in a project procedures manual that has been submitted and commented by the Bank. The procedures manual sets out the financial reporting requirements, a inter-agency agreement (*convention*) that describes the financial management responsibilities and staffing at each agency, and a detailed job description for the financial management specialist assigned to the PMU.

1.2 Country issues.

A Country Financial Accountability (CFA) report was completed in June 2004 for Tunisia. The Government system was assessed based on the performance of various Bank projects, and the overall system is considered satisfactory with good standards. The public sector group of MNA-PREM, has reviewed the overall budget management performance of the public sector in Tunisia and found it to be, except for the budget formulation, also of good standards. The budget formulation is considered outdated and in need of reform. The project will basically rely on existing financial management and accounting systems of MEDD and the partners institutions. The PMU will consolidate the project financial information and will be responsible for the submission of regular reports to the Bank.

1.3 Risk Analysis: Overall a low project financial management risk.

As stated above the risk is considered low in this project for various reasons. Firstly, MEDD as the institution in charge of the overall project coordination has satisfactorily implemented other Bank projects (although with a different coordination unit). Secondly, there is a low level of inherent risk based on the country's strong institutions and also on the good performance of Tunisia with the Bank's portfolio in general. Thirdly and most importantly, based on the Bank assessment of the partner agencies, the capacity level is found to be of good standards and quality. The only perceived risk lies in the coordination efforts required by the newly created PMU at MEDD. As the project is implemented by four institutions, the project needs a strong leadership and coordination from the new PMU at MEDD to ensure that all project information and reporting are consolidated at their level. The respective responsibilities and roles of each agency have been clearly set in the procedures manual, and this will ensure smooth implementation and timely project information.

Audit reports of the Bank projects in Tunisia are issued annually and, in general, on time and do not include any major issue. There are no other risks to flag.

1.4 Financial management: Planned organization structure, accounting, and internal control.

For public sector projects with external financing sources, the accounting is maintained in two parallel systems of cash-basis accounting. ADEB is a computerized accounting system for the public expenditures reflecting the Tunisian share of the budget, and SIADE (*Système Informatisé d'Aide à la Dette Extérieure*: Information System for Foreign Debt) is a computerized accounting system for all the foreign expenditures funded by foreign funding. The latter aims at maintaining separate accounting records for the foreign debt management and for donors reporting requirements. The system is centralized but operated at the level of individual ministries, i.e. MARH (data entry and maintenance). Accounting records are entered into one or the other of the systems once the payment takes place based on a set of well defined procedures.

Two agencies of the agencies (DGEQV and INSTM) are public administrative agencies with financial management and accounting procedures as described above. The other two agencies (CITET and APAL) are state-owned enterprises (*Etablissement Publique à Caractère Non-Administratif - EPNA)* who have internal control systems that are reliable. CITET in particular has a well designed cost accounting system. The two EPNA agencies are also subject to a well established national level central control (*contrôle d'état)*, that is designed and implemented in accordance with the applicable legislation. The CFA has assessed this national level system and concluded that it is reliable.

For international grants, accounting records are kept in the SIADE system and maintained by the various implementing agencies where payments also take place. Payments are prepared at the finance departments once the documentation is received from technical departments with their clearance for payment. Accounting documentation is then reviewed again at the respective finance departments to ensure compliance, accuracy and full supporting documentation. Payment orders are then prepared and submitted for approval to the Director General at each implementing institution. These are then sent to the Central Bank of Tunisia (BCT), where the special account (SA) is maintained for payments. The BCT reviews the supporting documentation, the eligibility of expenditures per the procedures and legal agreement then proceeds with the payment when everything is considered satisfactory.

Grant proceeds will be disbursed from the Bank into a special account at the BCT, and disbursements are made based on payment orders received from the disbursement unit. Information on payments from the grant proceeds will be centralized at the PMU where monthly reconciliation of the SA are made. The special account is monitored and managed by the Central Bank. Replenishments into the SA are made based on traditional disbursement methods, and are prepared and sent to the Bank by the BCT. These arrangements represent the standard procedure with most projects in Tunisia.

1.5 Budgeting and budgetary control.

The budgeting process starts annually in January, and includes budgets for the Bank-financed projects. The budget is approved as of December 31 of each year. All expenditures during the year are committed and paid for only if they are included in the approved budget. Strict budgetary control is in place through the computerized public sector budgetary system. Once implementation of an activity is complete, this is reviewed and cleared by the technical departments of the implementing agency for payment. Payment takes place in two parts: (i) part financed by the Government of Tunisia is processed by the Finance Department (*direction des affaires financiers*) at each partner agency, and charged to the agency's own budget, (ii) part financed by the grant is processed by the partner agency through a payment order to the BCT for payment from the SA.

1.6 Reporting and information system.

As stated earlier, for project accounting records, the two public sector accounting softwares, ADEB and SIADE, are used to maintain the accounting records of the Government's co-financing contribution to the project and the national debt financing respectively. These are used to make daily on-line data entries. In addition, each individual agency has its own software applications to generate its information and reporting needs to monitor its expenditures, commitments and disbursements.

The procedures manual sets out that Financial Monitoring Reports (FMR) are required and should be prepared and submitted to the Bank at least on a quarterly basis in the first year of the project, and thereafter semi-annually. The FMR should include:

(i) A statement of sources and uses of funds for the period and cumulatively including the project accounts balances;

(ii) A statement on the use of funds by components and category of expenditures.

2. Audit Arrangements

2.1 General audit arrangements

For the public sector implemented Bank projects in Tunisia, the annual audit is performed by the *Contrôle Général des Finances* (CGF), an entity of the *Ministère des Finances* (Ministry of Finance). The same entity will be auditing the GEF project. Auditors review mainly the work of the four partner agencies, including DGEQV and BCT's records of SA and replenishment requests. The audit should cover all aspects of the project and all sources of project revenues and expenditures. It should cover all the components of the project at all levels of project implementation. Coverage should include the audit of the financial transactions and an assessment of the financial management system including the internal controls and an opinion on these. It should be carried out in accordance with acceptable auditing standards. Terms of reference of the audit should be reviewed by the Bank. The annual audit report will be submitted no later than 6 months following the end of the fiscal year being audited.

As a public sector implemented project, it will also be subject to the audit by the *Cour des comptes* based on documentation received from MEDD and the implementing agencies. The CFA has reviewed the overall framework of internal and external audits, and concluded that they have high performance standards.

2.2 Flow of funds-Government counterpart funds.

The payments will be made directly through the Government's own budget system and will be paid directly from each of the budgets of the four partner agencies following their existing internal control systems and procedures. Payments will be made directly from the Government's Treasury system. Counterpart funding is expected to be released on time as expenditures are incurred and payments are made through the Treasury system. Smooth counterpart funding for the activities of the project is expected, as this has always been the case for most projects in Tunisia.

3. Disbursement Arrangements

The proceeds of the grant would be disbursed in accordance with the traditional disbursement procedures of the Bank and will be used to finance project activities through the disbursement procedures currently in use: i.e. withdrawal applications for direct payment, for special commitments and/or reimbursed accompanied by appropriate supporting documentation or using Statement of Expenditures (SOEs) in accordance with the procedures described in the Disbursement Letter and the Bank's "Disbursement Manual". The PMU and the Project Partner Institutions (DGEQV, CITET, INSTM and APAL) will be

responsible for submitting the appropriate supporting documentation for services rendered or activities implemented to the Central Bank of Tunisia (CBT) so that payments can be made from the special account opened for that purpose, or to submit applications for direct payment to the Bank. In case payments are to be made from the special account, the PMU and The Project Partner Institutions (Entities) are required to send to CBT payment orders for services rendered or activities implemented with supporting documentation. The CBT reviews the documentation received to ensure their compliance with the terms of the grant agreement and relevant project documentation as well as the eligibility of the expenditures being incurred, then proceeds with the payment, if these expenditures are deemed eligible. The CBT monitors the level of the Special Account (SA), and prepares and submits withdrawal applications to the Bank for replenishment of the SA. Under existing disbursement procedures, the PMU will be also permitted to submit withdrawal applications for direct payment accompanied by the necessary supporting documentation. As projected by Bank's standard disbursement profiles, disbursements would be completed four months after project closure.

3.1 Special Account (SA).

To facilitate disbursement of eligible expenditures the Government will open and establish at the Central Bank of Tunisia (borrower's Central Bank) a special account in US$ to cover grant's share of eligible project expenditures. The special account will be managed by CBT. The authorized allocation of the special account would be the equivalent of US$ 1,000,000 covering an estimated 4 months' of eligible expenditures financed by the grant. Initially the authorized allocation will be limited to US$ 600,000 until cumulative disbursement under the Grant reach a level equivalent to US$ 1.5 million. CBT will responsible for submitting monthly replenishment applications with appropriate supporting documentation for expenditures incurred, for retaining these documents and make them available for review by Bank supervision missions and project auditors. The replenishment applications will be prepared on the basis of information provided by the PMU. To the extent possible, all of grant's share of expenditures should be paid through the special account. The supporting documentation will include reconciled bank statements & other documents as may be required. The SA will be audited annually by the *Contrôle générale des finances – CGF*. The BCT team in charge of the Bank's special accounts for the Bank's portfolio in Tunisia is familiar with the Bank's disbursement and procurement rules and procedures, and its performance is considered satisfactory. In order to allow the project's activiites to start in a timely manner, the Bank will approve retroactive financing amounting to US$ 100,000.00 for project activities that will take place before effectiveness but after January 1, 2005.

3.2 Use of Statement of Expenditure (SOEs).

All applications to withdraw proceeds from the Grant will be fully documented, except for : (i) expenditures of contracts with an estimated value equivalent to US$ 100,000 or less for goods ; ii) US$ 100,000 equivalent or less for consulting firms, and (iii) US$ 50,000 or less for individual consultants and incremental expenditures which may be claimed on the basis of certified Statements of Expenditures (SOEs). Documentation supporting expenditures claimed against SOEs will be retained by the CBT and will be available for review when requested by Bank supervision missions and project auditors. All disbursements will be subject to the conditions of the Grant Agreement and the procedures defined in the Disbursement Letter.

3.3 Financial management supervision plan.

Two financial management supervision missions per year are recommended, given the low risk this project represents. The supervision mission will review in addition to desk work on audits, FMRs and other

matters. There will be also opportunities to visit with the project and review financial management aspects, if needed, during other country focused financial management activities as they take place.

Allocation of grant proceeds (Table C)

Table C: Allocation of Grant Proceeds

Expenditure Category	Amount in US$million	Financing Percentage
1. Works	1.11	75%
2. Goods	0.32	100% of foreign expenditures or local ex-factory expenditures; 80% of other items procured locally
3. Consultant Services	4.48	96% of local expenditures for services of consultants domiciled within the territory of the Recipient and 88% for services of other consultants
4. Incremental Expenditures		
4 (i) capacity building and training activities, operation of Local Development Committees, and scholarships for research	0.33	96%
4(ii) compensation for POU staff relocation to the town of Gabes	0.07	100%
Total Project Costs with Bank Financing	6.31	
Total	6.31	

Annex 7: Project Processing Schedule

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

Project Schedule	Planned	Actual
Time taken to prepare the project (months)	26	54
First Bank mission (identification)	09/30/1999	05/14/2000
Appraisal mission departure	11/03/2003	09/02/2004
Negotiations	11/16/2004	01/11/2005
Planned Date of Effectiveness	05/01/2004	05/01/2005

Prepared by:
Allan Rotman, Task Team Leader

Preparation assistance:
Sogreah / IDC Consultants provided preparation assistance to the Government of Tunisia, under GEF Preparation Grant (PDF-Block B)

Bank staff who worked on the project included:

Name	Speciality
Allan Rotman	Task Team Leader
Anders Alm	Coastal Zone / Environmental Specialist
Concepcion del Castillo	Senior Social Scientist
Michel Porcher	Coastal and Hydraulic Engineer (Consultant)
Antonio Cittati	Senior Procurement Specialist
Rafika Chaoulli	Financial Management Specialist
Pierre Prosper Messali	Financial Management Specialist
Siaka Bakayoko	Financial Management Specialist
Hovsep Melkonian	Disbursement, Senior Finance Officer
Hassine Hedda	Disbursement, Finance Analyst
Vincent Faivre	Project Management Procedures (Consultant)
Dominique Bichara	Legal, Senior Counsel
Marie-Francoise How Yew Kin	Team Assistant

Annex 8: Documents in the Project File*

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

A. Project Implementation Plan

1. Manuel de mise en œuvre du projet telle qu'adoptée par le Comite de Pilotage le 26 mars 2004 (version définitive mars 2004) (Annexe 1: Convention; Annexe 2: Budget détaille: Annexe 3: Programmation de passation de marches; Annexe 4: Plan de passation des marches; Annexe 5: Synthèse des marches; Annexe 6: Programme détaille).

B. Bank Staff Assessments

1. Procurement Capacity Assessment for the Gulf of Gabes Marine and Coastal Resources Protection Project (P069460) Offcial Memorandum - January 8, 2004

C. Other

1. L'approche méthodologique de l'Institut National des Sciences et Technologie de la Mer (INSTM) pour l'exécution des deux activités: (i) inventaire et cartographie du couvert végétale, et (ii) mise en place d'un réseau de surveillance des herbiers de Poisidonie (11 mai 2004).

2. Rapport de Phase 1: Diagnostique (août 2002) - Phase Préparatoire du Projet GEF/WB TF022968 - Protection des Ressources Marines et Cotieres du Golfe de Gabès. Prépare par Sogreah / IDC avec la collaboration de GIS-Poisidonie et de UNEP PAP/CAR.

3. ATLAS - Rapport de Phase 1: Diagnostique (août 2002) - Phase Préparatoire du Projet GEF/WB TF022968 - Protection des Ressources Marines et Cotieres du Golfe de Gabès. Prépare par Sogreah / IDC avec la collaboration de GIS-Poisidonie et de UNEP PAP/CAR.

4. Rapport de Phase 2: Document de Conception de Projet (novembre 2002) - Phase Préparatoire du Projet GEF/WB TF022968 - Protection des Ressources Marines et Cotieres du Golfe de Gabès. Prépare par Sogreah / IDC avec la collaboration de GIS-Poisidonie et de UNEP PAP/CAR.

5. Rapport de Phase 3: Document de Requête (version provisoire no 1 - mai 2003) - Phase Préparatoire du Projet GEF/WB TF022968 - Protection des Ressources Marines et Cotieres du Golfe de Gabès. Prépare par Sogreah / IDC avec la collaboration de GIS-Poisidonie et de UNEP PAP/CAR.

6. Rapport de l'Etude Sociologique (juin 2003) Phase Préparatoire du Projet GEF/WB TF022968 - Protection des Ressources Marines et Cotieres du Golfe de Gabès. Prépare par Sogreah / IDC.

7. Plan d'aménagement environmentale (OP4.01) (24 juin 2004)

8. Cadre de procédures pour la participation des communautés dans la gestion et la conservation des ressources marins et cotieres du Golfe de Gabès (OP4.12)) (24 juin 2004)

9. Plan de Gestion de l'Environnement (OP 4.01) (14 janvier 2005 - version finale)

10. Cadre de procédures pour la participation des communautés dans la gestion et la conservation des ressources marines et côtières du Golfe de Gabès (OP 4.12) (14 janvier 2005 - version finale)

*Including electronic files

Annex 9: Statement of Loans and Credits

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

19-Jul-2004

Project ID	FY	Purpose	Original Amount in US$ Millions					Difference between expected and actual disbursements[a]	
			IBRD	IDA	GEF	Cancel.	Undisb.	Orig	Frm Rev'd
P088929	2005	TN-ICT Sector Development Project	13.13	0.00	0.00	0.00	13.35	0.00	0.00
P082999	2004	TN-Education PAQSET II	130.34	0.00	0.00	0.00	123.17	8.92	0.00
P071115	2004	TN-Export Development II	36.00	0.00	0.00	0.00	37.61	0.00	0.00
P072317	2003	TN-NW Mountainous and For. Areas Dev.	34.00	0.00	0.00	0.00	37.97	3.27	0.00
P074398	2003	TN-MUNICIPAL DEVELOPMENT III	78.39	0.00	0.00	0.00	81.24	10.54	0.00
P048315	2002	TN-Protected Areas Management Project	0.00	0.00	5.33	0.00	4.78	1.79	0.00
P064082	2001	TN-TRANSPORT SECTOR INVESTMENT	37.60	0.00	0.00	0.00	34.06	14.91	0.00
P005750	2001	TN-AGRIC. SUPPORT SVCS	21.33	0.00	0.00	0.00	24.42	4.48	0.00
P048825	2001	TN-CULTURAL HERITAGE	17.00	0.00	0.00	0.00	20.75	5.12	0.00
P050945	2000	TN-Education PAQSET I	99.00	0.00	0.00	0.00	42.66	7.16	0.00
P035707	2000	TN-WATER SECTOR INVESTMENT PROJECT	103.00	0.00	0.00	0.00	68.45	7.50	0.00
P055814	1999	TN-EXPORT DEVELOPMENT	35.00	0.00	0.00	0.00	10.50	10.50	2.73
P005741	1998	TN Higher Education Reform Support I	80.00	0.00	0.00	0.00	29.87	28.38	4.57
P043700	1998	TN-TRANSPORT SECTOR INV	50.00	0.00	0.00	0.00	11.53	13.63	2.00
P005731	1997	TN-GREATER TUNIS SEWERAGE	60.00	0.00	0.00	6.95	20.62	32.37	6.83
		Total:	794.79	0.00	5.33	6.95	560.98	148.57	16.13

TUNISIA
STATEMENT OF IFC's
Held and Disbursed Portfolio
Mar - 2004
In Millions US Dollars

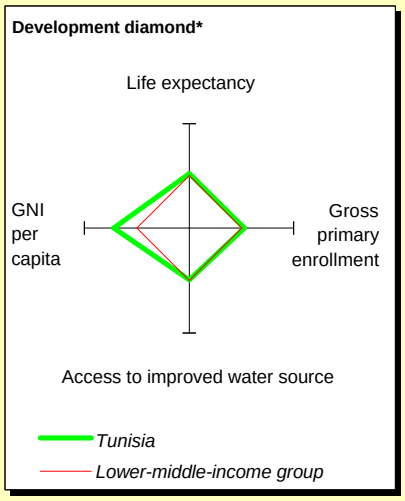
		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic	Loan	Equity	Quasi	Partic
1995	Maghreb IM Bank	0.00	0.33	0.00	0.00	0.00	0.33	0.00	0.00
1986/98	SITEX	0.00	0.77	0.00	0.00	0.00	0.77	0.00	0.00
1998	Tuninvest	0.00	4.29	0.00	0.00	0.00	4.29	0.00	0.00
	Total Portfolio:	0.00	5.39	0.00	0.00	0.00	5.39	0.00	0.00

		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic
	Total Pending Commitment:	0.00	0.00	0.00	0.00

Annex 10: Country at a Glance

TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

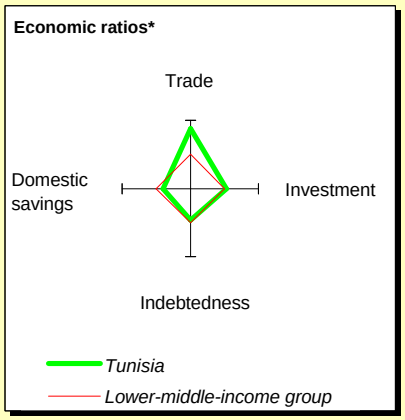
POVERTY and SOCIAL	Tunisia	M. East & North Africa	Lower-middle-income
2002			
Population, mid-year *(millions)*	9.8	306	2,411
GNI per capita *(Atlas method, US$)*	2,000	2,070	1,390
GNI *(Atlas method, US$ billions)*	19.6	670	3,352
Average annual growth, 1996-02			
Population *(%)*	1.2	1.9	1.0
Labor force *(%)*	2.4	2.9	1.2
Most recent estimate (latest year available, 1996-02)			
Poverty *(% of population below national poverty line)*	..	..	..
Urban population *(% of total population)*	67	58	49
Life expectancy at birth *(years)*	73	69	69
Infant mortality *(per 1,000 live births)*	24	37	30
Child malnutrition *(% of children under 5)*	4	..	11
Access to an improved water source *(% of population)*	80	88	81
Illiteracy *(% of population age 15+)*	27	35	13
Gross primary enrollment *(% of school-age population)*	117	95	111
Male	120	98	111
Female	115	90	110



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

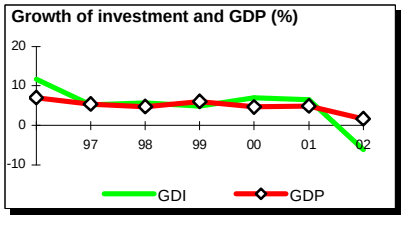
	1982	1992	2001	2002
GDP *(US$ billions)*	8.1	15.5	20.0	21.2
Gross domestic investment/GDP	31.7	34.3	27.9	25.8
Exports of goods and services/GDP	36.9	39.5	47.1	44.3
Gross domestic savings/GDP	21.2	27.4	23.4	21.4
Gross national savings/GDP	22.5	26.4	23.6	22.4
Current account balance/GDP	-9.2	-7.0	-4.3	-3.5
Interest payments/GDP	2.7	2.6	2.1	2.2
Total debt/GDP	46.4	55.1	54.5	57.2
Total debt service/exports	16.2	20.0	13.9	15.4
Present value of debt/GDP	..	..	54.2	..
Present value of debt/exports	..	..	102.7	..

	1982-92	1992-02	2001	2002	2002-05
(average annual growth)					
GDP	3.8	4.7	4.9	1.7	4.7
GDP per capita	1.3	3.2	3.7	0.5	3.7

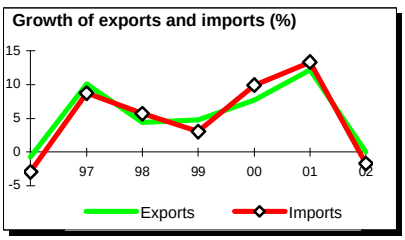


STRUCTURE of the ECONOMY

	1982	1992	2001	2002
(% of GDP)				
Agriculture	13.2	16.1	11.6	10.4
Industry	31.1	28.5	28.8	29.1
Manufacturing	11.1	16.5	18.5	18.6
Services	55.8	55.4	59.5	60.5
Private consumption	62.3	56.6	60.9	62.3
General government consumption	16.5	16.0	15.7	16.3
Imports of goods and services	47.4	46.5	51.7	48.7

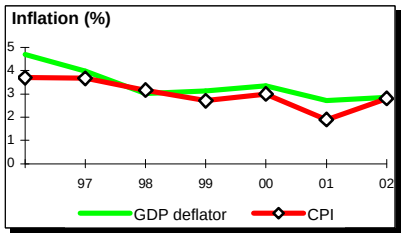


	1982-92	1992-02	2001	2002
(average annual growth)				
Agriculture	5.3	1.9	-1.5	-10.3
Industry	3.6	4.8	5.7	3.4
Manufacturing	2.0	5.6	6.9	2.2
Services	3.4	5.3	6.0	3.7
Private consumption	2.7	4.6	5.4	3.4
General government consumption	3.0	4.2	5.0	4.5
Gross domestic investment	0.8	3.7	6.4	-6.2
Imports of goods and services	3.0	4.7	13.4	-1.7



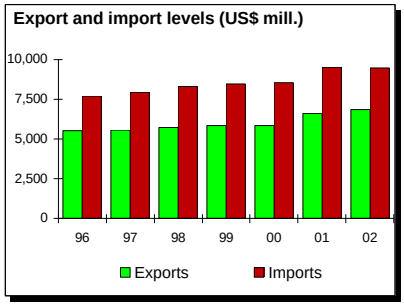
PRICES and GOVERNMENT FINANCE

	1982	1992	2001	2002
Domestic prices				
(% change)				
Consumer prices	..	5.8	1.9	2.8
Implicit GDP deflator	16.0	5.7	2.7	2.8
Government finance				
(% of GDP, includes current grants)				
Current revenue	31.7	26.8	24.6	24.6
Current budget balance	6.7	4.1	5.2	4.7
Overall surplus/deficit	-2.2	-3.0	-3.5	-3.1



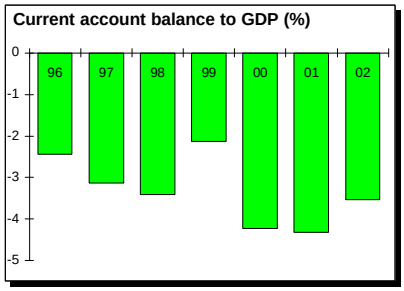
TRADE

	1982	1992	2001	2002
(US$ millions)				
Total exports (fob)	1,980	4,014	6,606	6,857
Fuel	911	609	610	641
Agriculture	63	416	541	489
Manufactures	965	2,432	4,981	5,272
Total imports (cif)	3,389	6,432	9,521	9,503
Food	356	430	654	653
Fuel and energy	377	449	888	886
Capital goods	1,032	1,578	2,240	2,236
Export price index *(1995=100)*	..	79	151	154
Import price index *(1995=100)*	..	89	107	109
Terms of trade *(1995=100)*	..	89	141	141



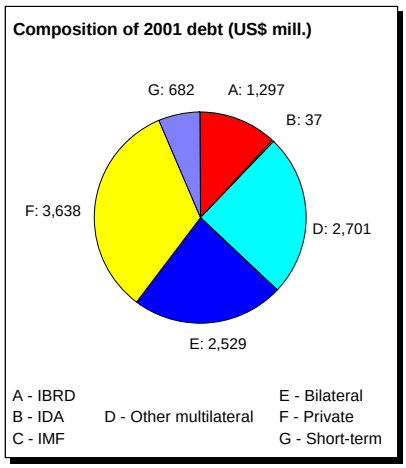
BALANCE of PAYMENTS

	1982	1992	2001	2002
(US$ millions)				
Exports of goods and services	3,002	5,973	9,518	9,539
Imports of goods and services	3,859	6,978	10,423	10,431
Resource balance	-856	-1,005	-905	-893
Net income	-294	-654	-941	-984
Net current transfers	403	570	983	1,130
Current account balance	-748	-1,089	-863	-746
Financing items (net)	776	1,171	1,118	895
Changes in net reserves	-27	-82	-255	-149
Memo:				
Reserves including gold *(US$ millions)*	614	862	1,999	2,301
Conversion rate *(DEC, local/US$)*	0.6	0.9	1.4	1.4



EXTERNAL DEBT and RESOURCE FLOWS

	1982	1992	2001	2002
(US$ millions)				
Total debt outstanding and disbursed	3,772	8,543	10,884	12,100
IBRD	376	1,470	1,297	1,464
IDA	68	56	37	35
Total debt service	563	1,342	1,465	1,641
IBRD	53	267	226	233
IDA	1	2	2	2
Composition of net resource flows				
Official grants	29	140	..	..
Official creditors	279	278	365	-90
Private creditors	29	74	229	556
Foreign direct investment	340	526	..	..
Portfolio equity	0	0	0	..
World Bank program				
Commitments	0	210	328	112
Disbursements	83	111	293	117
Principal repayments	27	149	148	156
Net flows	56	-39	145	-39
Interest payments	27	120	80	79
Net transfers	29	-159	65	-118



Additional GEF Annex 3: Baseline Biodiversity Description and the Threats to Biodiversity
TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

1.0 Study Region

For the purposes of this project, a project region was defined to involve the following:

(a) The Goveronates of Sfax, Gabès, Médenine, and Mahdia (southern part);

(b) All districts (*delegations)*adjacent to marine areas, from Chebba district in Mahdia Governorate to Ben Guerdane district (at the border with Libya) in the south (almost all are covered by formal land use plans and separate socio-economic baseline data has been complied for these districts);

(c) All littoral formations (e.g. sabhkas, beaches, lagoons, dunes and wetlands) and coastal ecosystems (e.g. oasis, oueds and particular vegetation communities);

(d) Public marine land *(Domaine Public Maritime -DPM),*which is generally defined as the high-water mark plus the bordering sand dunes and the wetland areas directly connected to the sea. In addition the DPM also includes adjacent sensitive ecological areas. In ecologically sensitive areas, this zone extends farther inland; the DPM is legally defined and mapped in detail;

(e) The marine study area is delineated by Ras Kaboudia (Cape Kaboudia) in the north, in the south by the border with Libya, and in the east, by the isobath minus 50 meters (also called depth of 50 meters). This depth, located about 100 km from the town of Gabès and 60 km from the towns of Sfax and Zarzis, was chosen because (i) it is the practical limit of littoral influences, (ii) most documents are only available up to depths of 40 meters and (iii) the major biodiversity formation of sea grass *(Posidonia)*does not exist below 40 meters.

2.0 Background to biodiversity sector issues: The marine environment

Sea grass beds (*Posidonia oceanica),* the most characteristic and important marine ecosystem in the Mediterranean, are endangered by several threats. They are critical to maintain water quality and habitats for almost all commercial fish and crustacean species, as well as marine flagship species such as turtles. There is a direct link between the presence of these beds and sustainable fish production.

The *Posidonia* beds in the Gulf of Gabès are considered the most extensive in the Mediterranean. Most of the benthic communities in the Mediterranean are present in the Gulf; some of which are exceptionally valuable in terms of biodiversity, both for Tunisia and the Mediterranean as a whole. Given the tidal range in the Gulf, which is almost unique in the Mediterranean (with the exception of the northern Adriatic Sea, between Venice and Trieste), the vertical amplitude of the medio-littoral zone is exceptional, with particular biological characteristics and highly diverse fauna.

The infra-littoral zone starts just below the average sea level and drops to the lower limit of the *Posidonia oceanica* sea grass beds, at depths between 20m-40m, depending on the transparency of the water. With respect to biodiversity, this is the richest zone. On hard substrates, the most noteworthy infra-littoral populations in the Gulf are *Cystoseira schiffneri* forests, found on the Kerkennah Médenine. In the

Mediterranean, these populations are extremely rare. Vast meadows of *Caulerpa prolifera* have been found on loose substrates and on beds of dead *Posidonia oceanic* in the Gulf of Gabès. They are spawning grounds and nurseries for numerous exploited species. In 1992, only a few shallow stations remained where *C. prolifera* were still present, no doubt because of turbidity and siltation. Recent observations confirm this decline.

Fish species in the Gulf of Gabès present warm-water affinities which distinguish them from those in the Gulf of Tunis and the country's north coast. They include various lessepsian species (those that have come to the Mediterranean from the Red Sea via the Suez Canal). Several tropical African species characteristic of the Senegalese coast are also found in the Gulf.

Around the Kerkennah Islands, the *Posidonia oceanica* has an unusual and extremely original appearance: Strips several tens of meters long by one-two meters wide weave through beds of *Cymodocea nodosa* and *Caulerpa prolifera,* between 0.5m- 3m deep. *P. oceanica* meadows are considered the most important ecosystem in the Mediterranean. Along with coral-producing areas, this is the main biodiversity reservoir, with nearly 20% of all species in the Mediterranean, i.e. a total of several thousand, have been spotted near the Kerkennah Islands. The sea grass beds are spawning grounds and nurseries for numerous species, including fish that are of economic interest. Thus, protecting the *Posidonia* beds is vital for conserving biodiversity in the Mediterranean and is justified for economic reasons (i.e. commercial fishing).

Some noteworthy species in Tunisia are listed in the Annexes to the Barcelona Convention and/or the Bern Convention. Many are quite valuable in terms of natural biodiversity, including sponges, mollusks (pen shells, cowries), crustaceans (large sea lobsters), diademe sea urchins, sea horses and marine turtles (loggerhead turtles, leatherback turtles and green turtles), whose survival can only be guaranteed if their breeding grounds are protected.

The project covers several zones. These include areas that were identified as especially sensitive, such as the Kerkennah Islands and Kneiss Islands nature reserve, which provide habitats for species or populations such as *Posidonia oceanica* sea grass beds (Jerba-Zarzis sector), *Cymodocea nodosa* sea grass beds (Bahiret El Bibane) (also called El Bibane lagoon) and *Neogoniolithon brassica-florida* reefs (Bahiret El Bibane). The reefs, consisting of *Neogoniolithon brassica-florida*, at Bahiret El Bibane, are a unique formation in the Mediterranean. Thus, they have great value in terms of natural habitat and are extremely fragile. Their destruction would be irreversible. Nothing is known of their fate since the last visual observations recorded in 1992. Given its high biodiversity, Bahiret El Bibane must be protected. The Kerkennah Islands also contain a diverse range of unique natural habitats of regional and international significance, are very sensitive to biodiversity threats and warrant special protection.

3.0 Background to biodiversity sector issues: The terrestrial environment

A survey by ornithologists in March 2000 in southern Tunisia found more than 140 species, mostly near the lagoons, sebkhas and oases, which are important sites for trans-Saharan migrating birds and wintering species. According to Wetlands International, nearly 7,000 pink flamingos were counted in January 1999 around Jerba island, particularly towards Bou Ghrara. A census of water fowl in January 2000 by the Tunisian Ornithology Group revealed an even larger population of pink flamingos, with 5,215 counted around Jerba and more than 20,000 in Bou Ghrara lagoon.

The threatened plant and animal species *Prosopis stephanian* (a legume), was classified as a top priority for Government protection. This plant, which attains its most westerly limit in Tunisia, has only a single station in the Gabès Oasis and is threatened with extinction due to urban pressure. The second priority is

the low steppe plant (several varieties) that is over-grazed by pasturing animals and must be conserved. Some bird species around the edge of the project area already receive special attention, since they are on the IUCN Red List of threatened species. These include the marbled duck (*Marmaronetta angustirostri*), falcon (*Falco naumanni)*, pallid harrier (*Circus macrourus*, soon to be threatened) and Audouin's gull (*Larus audouini*, which is less threatened, since conservation programs are underway in other parts of the world).

Land sites noteworthy for their biodiversity include: (a) Gabès Oasis (the western-most coastal oasis), (b) Bou Ghrara lagoon (which hosts waders and young flamingos), (c) Kneiss Islands, which are of extreme ornithological value, almost unique in the Mediterranean in terms of their tidal range and concentration of waders, gulls and sterns, among the highest in the area, (d) Bahiret El Bibane (which hosts various birds) and the Thyna salt flats, a major area for cormorants (more than a thousand in March 2000), herons, egrets, spoonbills, waders (more than 2,000 avocets), gulls and sterns (including a group of Caspian sterns). This area is already officially protected.

4.0 Main threats to biodiversity

The three main threats to marine and coastal biodiversity in the Gulf are (i) urban and tourism development concentrated along the coast, (ii) water pollution from industrial, urban and ship sources, and (iii) fisheries and over-fishing. These occur systematically along the rest of the Tunisian coast and other Mediterranean countries.

4.1 Urban and tourism development concentrated along the coast. Of the 40 districts (*delegations)* in the project area, 23 are coastal or insular and contain 72% of the project area's population of 1,138,000. The project area includes about 20% of the country's industrial plants. Tourism, the industry earning the most foreign currency, has 200 hotels, with over 52,000 beds, accounting for 27% of the country's overnight capacity. However, the hotel beds are unevenly distributed, with over 80% located in the Jerba-Zarzis area. Thus, urban, industrial and tourism infrastructure has severely pressured the coastal environment and its biodiversity. As the Government recognizes these intense development pressures, it has planned and regulated development in this part of the coast for many years. It created the *Agence de Protection du Littoral* (APAL) and devised urban master plans (SDAA) for Gabès and Sfax. In addition, APAL has developed plans for sensitive biodiversity areas, six of which were prepared for the Gulf coastal region, and which are integrated into the urban land use planning system. However despite these measures, coastal development pressures continue to overrun many very rich biodiversity sites, such as illustrated by the current status of Gabès Oasis.

4.2 Water pollution from industrial, urban and ship sources. Pollution from economic development is one of the main reasons for the loss of marine biodiversity in the Gulf. Industrial pollution mainly involves discharges from large-scale phosphate production plants concentrated in Sfax and Gabès. In Gabès, the phosphor-gypsum plant emits untreated liquid and solid discharges into the sea at Gabès that are acidic and have a heavy load of phospho-gypsum (about 600-650 tons/hour) and other pollutants (cadmium, fluorine). Since the plants opened in 1972, the total phospho-gypsum discharged into the Gulf of Gabès is estimated at 90 million tons. Such pollutants have damaged the coastal marine ecosystems, causing a severe recession of sea grass areas (i.e. loss in total productive area), particularly by *Posidonia oceanica* sea grass.

Urban pollution, which for many years contributed to the progressive eutrophication of the Gulf, is now controlled due to the Government's sustained investments during the 8th and 9th Plans for urban wastewater collection and treatment. These efforts will continue during the 10th Plan. Thus, 70%-80% of urban wastewater from the coastal zone is treated before being discharged into the Gulf of Gabès.

However, urban solid waste is disposed of at sites that are only semi-controlled or uncontrolled (also called "dumps"). In 2001, there were 55 disposal sites, capable of absorbing just 40% of the waste produced. This caused coastal pollution, and the Gulf of Gabès area was no exception. Thus, the Government prioritized the building of modern sanitary landfills in the 10th Plan under the PRONAGDES Program.

Pollution from ports and ships still damages much of the marine environment. Ballast water is also a main mechanism for introducing alien species, which threaten marine and coastal biodiversity. The area's four commercial ports generate about 100,800 tons/year of liquid waste, of which 36,000 contain hydrocarbons and 2,560 solid waste. Also, it was estimated that in the fishing ports, potential sources of liquid waste containing hydrocarbons are equal to or even greater than those in the commercial ports, since the proportion of used oil is twice that in commercial harbors. The fishing boats do not treat liquid effluent (particularly that which contains hydrocarbons), and discharge it directly into the sea. La Skhira terminal is the only one in the project area with specific installations to treat ballast water polluted by hydrocarbons. It receives mainly very large international ships. Moreover, no reception installation exist in the project area to treat water used to wash tanks in ships that carry chemicals. A MEDA project for equipment to handle waste, ballast water and tank washing water in the Mediterranean, particularly in Tunisia, was recently started (the first meeting of the Steering Committee was in Malta in May 2002). The project will evaluate the treatment needs in various countries based on the quantities produced and the capacities of existing installations. An earlier project, Pollution Management in the South-West Mediterranean (1993-1999) for the three Maghreb countries, managed by the World Bank and financed partly by US$20 million GEF funds, is now completed, addressed some of these issues. However no significant facilities were constructed in the project area, and no emergency procedures manual for accidental spills of chemicals or petroleum has been prepared for the project area.

4.3 Fisheries and over-fishing. Fishing is both a main cause of environmental deterioration and a victim of the degraded conditions. The sector accounts for 8% of Tunisia's agricultural production, or 1% of GDP, and provides regular income for 60,000 fishermen, 30,000 of whom operate in the Gulf of Gabès.

Studies of fish resources carried out from 1998 onwards by the INSTM revealed (a) over-exploitation of almost all species, (b) a drop in production from the Gulf of Gabès over the past decade relative to national production, and (c) a drop in value and quantity during the same period in the share from coastal fisheries relative to the overall Gulf harvest.

The reduced harvest, which affects small-scale coastal fisheries, is due to unsustainable fishing practices

such as (a) using non-selective or prohibited fishing equipment, (b) operating bottom trawls in areas reserved for coastal fishing, which degrade natural habitats and jeopardize the equitable distribution of resources, and (c) catching immature specimens of certain types of fish outside the legal fishing season, threatening their survival. Large areas of *Posidonia* sea grass and thus the entire biodiversity associated with them have been destroyed, particularly by the bottom trawls.

4.4 Other threats to biodiversity. More indirect forces ruin or significantly diminish the results of Government efforts to protect the environment. For example, alien species[1] with strongly invasive characteristics represent a potential threat to the original biodiversity and also threaten the overall balance of the coast and related objectives of integrated development, such as public health (toxic tides, for example), fishing and seaside tourism. Thus, knowledge about these species must be improved, along with measures to control them. To this end, the project includes an inventory and monitoring program for alien species and a strategy for managing ballast water.

Other threats to marine biodiversity are (a) an inadequate institutional framework and experience to establish and manage protected areas, (b) lack of information about the environment and biodiversity in the Gulf of Gabès (needed to devise further actions) and (c) insufficient involvement of stakeholders in understanding and implementing necessary measures. Since direct threats to biodiversity degradation are reasonably well controlled (i.e. major urban and industrial point sources of pollution as described in the diagnostic report prepared during project preparation), the project will concentrate on indirect threats to ensure that actions are implemented in the shortest possible time to protect biodiversity and sustain development in the Gulf of Gabès coastal area.

[1] "Alien species" covers all animals and plants that do not originate in the Gulf region and whose introduction is due to deliberate or unintentional actions such as natural passage through the Suez Canal (Lessepsian migration), contained and transported by ballast water or ship hulls, or imported for fish-farming or aquariums. These species are also defined as "introduced," "exotic" "invasive species.", and “invasive alien species”.

Additional GEF Annex 4: Institutional Analysis
TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

1.0 National Institutional Framework

Several ministries and institutions have a positive effect on biodiversity and marine resources, while others, focused on economic development in the coastal area have not mainstreamed environmental protection into their priorities, and are inadvertently threatening biodiversity resources. The ministries concerned with biodiversity are:

- Ministry of Environment and Sustainable Development (MEDD), which includes several agencies relevant to the project, (i) *Direction Générale de l'Environnement et la Qualité de Vie* (DGEQV), (ii) APAL is responsible for coastal land-use management (including permitting) within a narrow strip between the low water tide line and the upper water line referred to as the Maritime Public Lands (*Domaine Publique Maritime-DPM).* In this narrow coastal band, APAL is responsible to control all construction and development activities, including planning for sensitive biodiversity areas; (iii) the International Center for Technology and the Environment of Tunis (CITET) is specialized in training and capacity strengthening for environment and sustainable development, and is responsible for public awareness on environmental issues and strengthening capacity for implementing entities to adopt new technologies; (iv) the Regional Environment Directorate for the Southern Coastal Region (DRLS); and (v) *Agence Nationale de Protection de l'Environnement* (ANPE) which enforces environmental regulations, reviews environmental impact reports, carries out environmental monitoring and supervises solid waste management activities.
- Ministry of Agriculture and Water Resources (MARH) includes the Directorate General of Fishing Aquaculture (DGPA) which is responsible for data collections and regulations on marine fishing activities.
- Outside the Government sector, other organizations such as professional federations and scientific bodies are also involved in the protection of marine and coastal resources.

The ministries concerned with economic development are:

- Ministry of Tourism which is responsible for planning and developing tourism areas, which includes specialized agencies such as AFT and ONTT
- Ministry of Public Works, Housing and Land Use Planning (MEHAT) which includes the Directorate General of Regional Development (DGAT).

Given the multiple agencies, the project will need to ensure that communication is effective, so accomplishments from pilot activities can be shared and replicated.

2.0 Selection of the Executing Agency

Four entities were evaluated to be the executing agency: (a) the national level DGEQV within MEDD, (b) the Regional Environmental Directorate for the Southern Coastal Region (DRLS), part of MEDD (c) APAL, and (d) ANPE. Two other agencies, the Directorate General of Fishing and Aquaculture (DGPA), part of MARH, and the Southern Development Office (ODS) were considered. The analysis of these latter two agencies was not continued in depth, since their administrative responsibilities and human resource capacities were not consistent with proposed project activities.

The four agencies subject to detailed analysis were evaluated on the basis of:

(a) Replication and sustainability. Potential for replicating the project experience so as to ensure lasting results in the Gulf.
(b) Role. Pertinence in relation to project objectives and activities.
(c) Leadership and partnerships. Ability to coordinate with other agencies' efforts, develop partnerships with target groups and run a new integrated management organization.
(d) Available resources. Those available at the regional level and possibility of redeploying them for the project.
(e) Efficient management. Ability to control procurement and financial management. Resources available to sign contracts speedily.

DGEQV (at the national level within MEDD). As the main national unit responsible for environmental issues and strategies, the DGEQV coordinates and supervises activities of other agencies, as well as interacts with all stakeholders. It has experience coordinating international projects with external bi-lateral and multi-national agencies, and has gained experience during implementation of project preparation activities. The Gulf of Gabès project is considered a national level project, and the precedents it creates will be replicated best by a national-level entity.

DRLS (at the regional level within MEDD). As the main contact for regional and local stakeholders, DRLS can coordinate and supervise activities by other stakeholders and environmental agencies at the regional level. However, the DRLS has limited financial and procurement capacity to implement the project, and would require considerable strengthening.

APAL (at national and regional levels within MEDD). The national strategy and policy for the protection of coastal areas is under the leadership of MEDD who is also responsible for all policy decisions. MEDD coordinates all the actions of the various institutions within MEDD including APAL. Accordingly APAL is responsible for:

- management of the coastal fringe (*espace littoral*) through studies and the regulations of physical structures;
- management of the public marine lands (*Domaine Public Maritime - DPM*);
- undertaking studies to protect and develop the potential of natural zones; and
- data collection and monitoring of the status of coastal ecosystems.

ANPE (at national level within MEDD). The main role of this environmental protection agency is to protect enforce all regulations against forms of environmental degradation, including pollution control and approving environmental impacts assessments. ANPE gained experience in a previous coastal management project, the Sfax Coastal Development Plan (UNEP/MAP), from 1994-1998. Like APAL, ANPE has flexible administrative arrangements for managing procurement and funds. It remains part of MEDD, but as it does not have a specific institutional mandate for coastal and marine areas, its ability to replicate the pilot areas and provide leadership in sustainability is limited.

The above analysis shows that both ANPE and APAL, with their regional offices and national mandates have the capacity to implement the project at the regional and local level, and both have efficient project management structures. However, only DGEQV within MEDD has the clear national role to mainstream environmental issues and coordinate strategies among national agencies.

Thus, DGEQV was selected as the implementing agency responsible for overall leadership, project management and coordination. Several partner agencies will still participate in the project to deliver technical and specialized capacity, as described below.

3.0 Project Implementation Arrangements (see organization charts below)

3.1 National Steering Committee. The steering committee will have primary oversight at the national level, and be chaired by the Minister of MEDD (or his named representative). It will include representatives of (a) MEDD - APAL, DGEQV, ANPE, DRLS, CITET and the GEF Focal Point, (b) Ministry of Finance, (c) Ministry of Development and International Cooperation, (d) Ministry of Transport, (e) INSTM within the Ministry of Scientific Research and Technology and Capacity Development (MSTDC), (f) Ministry of Interior and Local Development, (g) MEHAT; (h) MARH; and (i) a member of the profession from the Tunisia Union for Agriculture and Fishing (UTAP). The Steering Committee will meet twice a year to ensure that project activities are consistent with ongoing or planned strategies, actions and aims of other sectors.

3.2 Project Agreement Monitoring Committee. The monitoring committee will meet regularly (approximately every three months and as required on an *ad hoc* basis) to resolve technical, financial and procurement issues and coordinate those of common interest to each partner agency. The Monitoring Committee consists of five members (National Project Director, and the Directors General (or his named representative)) of the four major implementation partners - DGEQV, CITET, INSTM and APAL). The National Project Director will chair the meetings and be responsible for preparing and distributing the minutes of meetings.

3.3 National Level Project Management Unit (PMU) (located in Tunis). The central PMU within DGEQV, will oversee project implementation and coordination (for all technical, scientific and financial tasks). The National Director (part-time position) and National Coordinator (full-time position) are staff members from DGEQV and will report to the DGEQV Director General. Also, a financial management specialist and assistant, as well as a procurement specialist will report to the National Director. The PMU will coordinate all aspects of procurement for contracts and financial management with staff from MEDD based in Tunis (see organization chart in Annex 12). The PMU will prepare regular progress reports (twice a year), that will describe the project's key performance indicators and corrective measures needed in the event of lack of progress towards the development objective or other delays in project components. The technical supervision of field investigations and analysis of results during contract implementation will be carried out by specialists in the POU as

described below.

3.4 Regional Level Project Operations Unit (POU) (located in town of Gabès). A POU in the town of Gabès, will provide the technical capacity to supervise implementation of all project activities. It will also ensure participation of local stakeholders in preparing management plans for the six pilot sites. The POU will be coordinated by a POU Director (a full-time position), with part-time support a regional advisor. Other full-time staff will be responsible for various tasks, such as the information exchange center and studies (Component 1), capacity building/public awareness (Component 2), marine/coastal biodiversity (Component 3), and biodiversity management (Component 4). Staff will include a GIS specialist, financial assistant and support staff (see organization chart in Annex 12).

Supervision of project implementation is divided into four components (as described above), with a separate agency responsible for each: Component 1, DGEQV; Component 2, CITET; Component 3, INSTM and Component 4, APAL

3.5 Local Participation. At minimum six local development committees (local DCs) will be created at each pilot site. They will regularly contact local communities, groups and individuals and help develop the integrated management plans for each pilot area. There are also existing Goveronate level DCs that are regularly consulted on regional issues, and additional participatory mechanisms and techniques will be developed to address project issues as required during project implementation.

Additional GEF Annex 13: Environmental Management Plan (OP4.01)
TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

Environmental Management Plan (EMP)

1.0 Project Objectives

The main development objective of the Project is:

- Establish a functional integrated monitoring and participatory management system for the project area to manage biodiversity degradation in the Gulf of Gabès region.

2.0 Project Description

The Project consists of four main components, and the overall cost of the project is estimated at approximately US$ 9 million, of which approximately US$ 6 million would be funded by a grant from the Global Environment Facility (GEF), and approximately US$ 3 million would be financed by the Government of Tunisia.

Component 1: Institutional strengthening for improved biodiversity management in the Gulf of Gabès.

The main activities for this component are: (1) Project staff and management; (2) quality assurance and progress reporting of the scientific, technical and participatory activities; (3) long-term strategy for biodiversity conservation for the Gulf of Gabès region, that incorporates lessons learned from the Project and is incorporated into mechanisms for the replication of the pilot activities; (4) an Information Exchange Center which will set up user friendly filing (archiving) system, and use a Geographical Information System (GIS); (5) a pilot Strategic Environmental Evaluation (SEE) to evaluate impacts on biodiversity of the mid-to-long term tourist development plans for the Gulf of Gabès; and (6) strategy and procedures for protection of biodiversity from accidental chemical and oil spills.

Component 2: Training, capacity-building and dissemination.

The aim of this component is to strengthen human resources for technical, scientific and participation issues for biodiversity management in the Gulf of Gabès region. The component will consist of: (1) the preparation and implementation of a training program aimed at Project staff (both part-time and full-time) on Mediterranean and international experience in marine and coastal biodiversity management; (2) a participatory strategy (with participatory tools and mechanisms) and an awareness program for the target communities, local stakeholder groups and the general public, for application to biodiversity management plans; (3) a capacity building program to strengthen enforcement of regulations for biodiversity protection; (4) socio-economic field surveys of the target populations and major stakeholders; and (5) implementation of the participation strategy and the public awareness program.

Component 3: Baseline data acquisition and applied biodiversity monitoring.

The aim of this component is to update or acquire technical, scientific and social data required as basic inputs for the biodiversity management plans (see Component 4 below). The activities of this component include the following studies and inventories: (1) baseline hydrodynamics and water quality studies in general for the Gulf of Gabès, but focused on Jerba-Zarzis area in particular; (2) inventories of terrestrial flora and fauna at the priority sites so as to prepare the management plans; (3) an inventory of the marine plant cover and mapping of *Posidonia* sea grass beds for the Gulf of Gabès in general; (4) creation of a sea grass bed monitoring network focused on the management areas; (5) an inventory of marine and lagoon species of regional or global interest and the definition of monitoring methodologies; (6) an inventory of introduced and alien species and their distribution within the Gulf, and definition of monitoring methodologies; (7) preparation of regional ballast water management strategy that would address alien species; (8) identification of biodiversity impacts caused by the fishing fleet, monitoring of impacts within and adjacent to the sea grass pilot area and recommended changes to fishing practices.

Component 4: Participatory Biodiversity Management Plans and mainstreaming biodiversity protection.

The main aim of this component is to prepare sustainable biodiversity management plans for the six pilot areas, and implement the plans for the chosen three priority areas. All the plans will be prepared based on a participatory approach. This component includes: (1) preparation of a general methodology for biodiversity management and participation mechanisms, (2) preparation of biodiversity management plans with implementation activities for sea grass protection pilot site (3) preparation of biodiversity management plans with implementation activities for Gulf of Bou Ghrara pilot site; (4) preparation of biodiversity management plans with implementation activities for the Kneiss Islands pilot site; (5) preparation (only) of biodiversity management plans for El Bibane lagoon (6) preparation (only) of biodiversity management plans for Kerkennah Islands; and (7) preparation (only) of biodiversity management plans for Gabès Oasis.

3.0 Project Location

The project will cover the full Gulf of Gabès area, with attention focused on 6 areas that will benefit from biodiversity management plans, including a sea grass pilot area. The six pilot areas are: (i) a sea grass pilot area near the Kerkennah Islands, (ii) Kneiss Islands, (iii) Gulf of Bou Ghrara, (iv) Kerkennah Islands, (v) El Bibane lagoon, and (vi) Gabès Oasis. The preparation and implementation of management plans will be undertaken for the first three sites listed within the project activities. Only management plans will be prepared for the last three pilot sites within the Project, and the Government will implement those plans sites under its own financed program.

4.0 Applicable Social and Environmental Policies

Under the World Bank's social and environmental safeguard policies, this Project is classified as Environmental Category B for Operational Policy 4.01 (OP4.01). Under Category B, the potential impacts are limited and usually confined to site-specific locations for which mitigation measures can be readily designed.

Given the nature of the proposed Project components, some activities may cause loss of assets to a few people (e.g., less than 200 people), or restrict access that causes adverse impacts on livelihoods. Under

such circumstances, social mitigation measures would be required in order to conform with the Bank's policy on Involuntary Resettlement OP4.12. For such cases a Resettlement Policy Framework has prepared as a separate document.

5.0 Key Potential Impacts

Potential Direct Impacts: This project is composed of mainly of studies, technical assistance activities and purchasing of small equipment items. A few small scale physical structures will be constructed to assist in the biodiversity protection at the three priority sites chosen for implementation of the management plans. The proposed physical structures consist of: (i) a visitor reception building for the Gulf of Bou Ghrara area, (ii) strengthening and rehabilitation of small infrastructure for the Kneiss Islands, and (iii) anti-trawling structures and/or artificial reef structures at the perimeter of the sea grass pilot area to be located near the Kerkennah Islands. Environmental mitigation measures will be incorporated into choice for the final site locations and final designs for these physical structures. In addition complementary mitigation measures structures will be detailed during the preparation of the biodiversity management plans for each pilot area to ensure minimal environmental impacts.

Potential Indirect Impacts: Although the direct impacts of project activities are minimal, the key external threats and impacts to biodiversity have also been carefully taken into account in the design of the project. In particular, the impacts of industrial and urban water effluents on biodiversity have been reviewed during the site selection process for the 6 pilot areas for which biodiversity management plans will be prepared. Based on the existing information, the indirect impacts to the 6 biodiversity sites from degraded water quality generally in the Gulf of Gabès (due primarily to industrial and urban effluents) is also considered to be minimal. The proposed biodiversity pilot sites are over 30-40 km distance from a major effluent source at the phospho-gypsum plant at Gabès.

Furthermore during the project implementation, the phospho-gypsum plant at Gabès is scheduled for a full renovation of its production process that will eliminate industrial liquid effluents into the Gulf of Gabès. Secondly two major urban wastewater plants are becoming operational on Djerba Island which greatly reduce the existing urban effluent impacts in the Gulf of Bou Ghrara. The project also includes mitigation measures in Component 2 that will monitor that water quality threats to biodiversity so that indicators are identified and mid- and long-term trends in water quality impacts are established.

6.0 EMP Actions : Proposed Mitigation Measures, Monitoring and Capacity Building

Mitigation through Management Plans: The main direct physical impacts of this project are related to a few small scale physical structures will be constructed in three pilot management areas: (i) a visitor reception building for the Gulf of Bou Ghrara area, (ii) observation platforms for the Kneiss Islands area, and (iii) anti-trawling structures and/or artificial reef structures at the perimeter of the sea grass pilot area to be located near the Kerkennah Islands. Environmental mitigation measures will be incorporated into choice for the final site locations and final designs for these physical structures. In addition complementary mitigation measures structures will be detailed during the preparation of the biodiversity management plans for each pilot area to ensure minimal environmental impacts. Also issues related to physical cultural property will be reviewed and any potential locations will be appropriately screened to assure the absence of significant cultural property, so as to conform to World Bank policy OPN 11.03.

Mitigation through Participation: The initial studies identified as key stakeholders those whose sources of

income are from tourism, fisheries (i.e. traditional as well as commercial fishing), artisan industries, and other local industries. Participation is seen as one of the essential building blocks to ensure the protection of degraded biodiversity resources, and balance the interests of long-term biodiversity conservation with other investments. Initial steps towards the formulation of a participatory strategy are based on two key concepts: (a) that the stakeholders must understand the Project objectives and social development outcomes and in order to take an active part in the decision-making process, and; (b) that their ideas, approaches and solutions must be taken seriously and incorporated into the design of the Project, and in particular into the design of management plans.

The participation mechanisms will be validated and tailored to the specific social realities of each of the pilot sites jointly with the stakeholders. With this approach, no management plans or other measures will be implemented without the appropriate consultation and participation of the key stakeholders. The target populations will participate to: (i) act as sources of up to date information on the local conditions (fishing, production, etc) which will also serve as an initial mechanism of raising awareness about threats to biodiversity; (ii) react to proposals for management in order to learn what measures the population is willing to enact towards a responsible and sustainable management of the biodiversity resources; (iii) jointly formulate the final agreed mechanisms necessary to ensure protection of ecosystem biodiversity. Included in the participation will be measures to address possible temporary restriction to resources used by the population.

Throughout the Gabès region and at all levels ranging from small coastal communities to large Government institutions, the Project involves specific management, training and awareness activities aimed at improving the conservation and sustainable use of biodiversity. The Project will increase collective awareness of the need for and benefits from biodiversity protection and instill in stakeholders a more responsible attitude, which is a prerequisite for sustainable management of the natural environment.

Mitigation through Environmental Monitoring: It is recognized that there is a long term shrinkage of the *Posidonia oceanica* sea grass beds, that will be difficult to reverse within a human timescale (60-80 years). This shrinkage is due several factors whose extent and degree of influence is poorly understood. Some of the shrinkage is due to long term natural environmental trends and phenomena that are poorly understood; some shrinkage is due to dragging on the sea beds of fishing equipment; and some shrinkage is due to general pollution pressures whose effects are poorly understood, both in terms of basic ecological processes and in terms of geographic locations. The Project will undertake a program of upgrading the baseline data (socio-economic and environmental), and extensive applied environmental monitoring research will be carried in Component 3. The overall goal of Component 3 is to significantly improve the scientific understanding of the basic ecological interactions in marine and coastal systems within the Gulf of Gabès region. The work in Component 3 will includes mapping of sea grass beds, investigations on distribution of fish species (e.g. species of global interest, regional interest and alien species) and an overview of the effects of fishing pressures on biodiversity and improved fishing practices to protect biodiversity. There will be a focus to identify key indicators of biodiversity, in particular for the pilot areas at the sea grass area and at the Gulf of Bou Ghrara. The indicators will be based on the key interactions between sea grass beds, fish reproduction, spawning, water quality and fish population growth so as to develop scientifically based management mechanisms for biodiversity conservation.

Capacity Building: An extensive capacity building program will be undertaken within the project under Component 2, for all project stakeholders, as for example : public awareness for the general population; participation mechanisms shared with local development committees; consultations with NGOs; training for Project staff; strengthening of enforcement of regulations; and workshops to share and to integrate all data with stakeholders and scientists. The goal of this large capacity building effort is to strengthen the

participative approach for the Project, and to strengthen the knowledge base and human resources who will then support the long term sustainability of biodiversity in the Gulf of Gabès region.

Additional GEF Annex 14: Process Framework for Community Participation (OP4.12)
TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

I. Summary of project objectives

The main development objective of the Project is:

- Establish a functional integrated monitoring and participatory management system for the project area to manage biodiversity degradation in the Gulf of Gabès region.

The project has four (4) components:
1. Strengthening, at the regional and local levels, of the logical framework for the effective protection and management of the marine and coastal biodiversity of the Gulf;
2. Strengthening of human capacities at all levels of decision-making, through appropriate training and outreach to local populations, Government officials, and scientists, and through the establishment of a participatory approach in the pilot sites where management plans and a program of applied research are to be implemented;
3. Acquisition of knowledge and data on the Gulf of Gabès, and particularly on the selected pilot sites, in order to arrive at a precise definition of the technical and scientific foundations of the proposed management programs, result objectives and monitoring indicators;
4. Preparation of biodiversity management plans for the six (6) selected zones (i.e., the Marine Protected Area (MPA), the Gulf of Bou Ghrara, the El Bibane lagoon, the Kneiss islands, the Kerkennah islands, and the Gabès oasis) owing to their importance in terms of global biodiversity, along with implementation of pilot plans in four priority sites, including the MPA. This implementation is based on a participatory approach involving all relevant communities or interest groups.

II. Target Population and Benefits

II.1. Target population

The target population includes: communities that exploit coastal marine resources at the various sites chosen, comprising first and foremost fishermen, farmers in the Gabès oasis, local NGOs active in the development and environmental protection sector, local professional organizations, local authorities, and the tourism and hotel sector (particularly in the Jerba-Zarzis area).

Detailed analysis of the project's target population was carried out during the preparation phase. The aims of this analysis were (a) to identify potential beneficiaries or actors in those parts of the Gulf of Gabès affected by project activities; (b) to identify positive as well as negative impacts that the integrated management program could have on the parties involved; (c) to lay the foundations for a community participation strategy to be followed during project implementation, as well as for other socioeconomic studies deemed necessary for project monitoring and evaluation.

II.2. Global and regional benefits

It is important to emphasize that the project will benefit from conservation and/or management measures concerning the marine and coastal environment of the Mediterranean region, while at the same time

enhancing their overall efficacy.

The project will help expand areas that are actually protected in coastal and marine zones. It will improve and enhance the protection of species of global or regional importance, and will reduce the trend toward the degradation of unique ecosystems. It will develop practical models to guide the implementation of participatory management of biodiversity in other parts of the region. It will update information and data pertaining to biodiversity in the Gulf of Gabès, and will establish a store of scientific data on the Gulf that will enhance overall knowledge of biodiversity in the western Mediterranean basin.

Sites such as Bou Ghrara and the Kneiss islands are of global importance in terms of bird life. The Kneiss islands have already been declared a reserve and were recently designated as a Specially Protected Area of Mediterranean Interest (SPAMI). The Bou Ghrara site has great potential for economic exploitation of its biodiversity owing to the heavy concentration of tourism operations on its periphery. The Gabès oasis site is exceptionally important at the regional level, being the only example of a coastal oasis environment. Seriously threatened by urbanization, industry, and inappropriate farming practices, this oasis could quickly lose all its biodiversity value and agricultural production capacities. The preparation of its management plan is an essential first step in the sustainable protection of plant varieties that are unique in the region and currently threatened with extinction.

The area of El Bibane and the Kerkennah islands is home to exceptional benthic formations that are unique in the Mediterranean and, in some cases, in the world. As these areas are located in sectors that are already or will in the medium-term be subjected to pressure from coastal development in general and to hotel-based tourism in particular, it is important to anticipate the degradation of the environment in order to preserve their exceptional biodiversity while at the same time respecting the imperatives of local economic development. The preparation of management plans proposed in the context of this project is a first step toward attaining these long-term objectives.

The project may also strengthen a number of current programs launched at the regional level, just as it may benefit from the contributions of these projects in the implementation of certain activities.

II.3. National and local benefits

More generally, the huge beds of *Posidonia* sea grass that are a special feature of the Gulf of Gabès have shrunk significantly over the past several decades due to heavy industrial pollution and destructive fishing practices. Today, it is necessary to preserve areas in which this sea grass is still in good condition, so that the highly productive ecosystems that depend on it can be rehabilitated and the Gulf's fish stocks replenished. The establishment of fishing reserves characterized by anti-trawling structures and artificial reefs will simultaneously preserve marine biodiversity, promote the restocking of coastal waters, and eventually improve revenues from small-scale coastal fishing.

The protection of rare or endemic species will help maintain the richness of Tunisia's biodiversity. Improvement of the legal and regulatory framework, training for the institutions and NGOs concerned, and institutional arrangements developed at the regional level will all help to enhance the country's overall capacity to protect and manage its natural resources. The management models and funding mechanisms adopted for the protected areas will be easily replicable in the other parts of the country, thus reducing both implementation costs and the risks of failure.

At the local level, the project will implement and test mechanisms enabling local communities, local authorities and NGOs to manage their natural resources efficiently and sustainably and increase their

incomes, thereby reducing the poverty that still persists in rural areas in the south. The project will help improve management of small-scale coastal fishing by encouraging the reproduction of fish species and the restocking of coastal waters through the creation of fishing reserves and the promotion of environmentally-friendly small-scale fishing techniques and selective catches.

III. Process framework (OP 4.12) for community participation in the biodiversity management and conservation of pilot sites

The World Bank's Operational Policy (OP) 4.12 applies in cases where the project may have economic social or environmental impacts (for example: disruption to means of production supporting livelihoods; declines in productive resources, or loss of revenues to persons due to restriction of access to resources upon which these persons depend; relocation of persons to environments where there is increased competition for resources or where their techniques of production are less effective; where the social or community networks are weakened as a result of restriction of access to resources or relocation, land acquisition, etc.).

In these cases the Bank's policy OP4.12 requires the preparation of a framework that (1) defines the impacts and the measures to mitigate impacts; (2) the compensation measures in those cases where the affected persons suffer a decrease in their assets due to restriction of access to the resources; (3) the measures to ensure community participation; and (4) the preparation of a plan, acceptable to the Bank, outlining the specific measures to be taken to assist the affected persons and the plan to implement these measures. The plan can take the form of a management plan for the affected persons and resources.

The Gulf of Gabès Marine and Coastal Protection Project has been designed in such a manner that at this time there is no component or activity that would involve the acquisition of land nor the loss of revenue or economic resources. Consequently, there should be no land acquisition nor involuntary resettlement within the project.

IV. Process framework for community consultation and participation

Steps in the development of a participatory strategy: The participatory strategy consists of: (a) identifying and counting people who might be affected by the project; (b) defining eligibility criteria for people affected by the project; (c) developing criteria for the identification of vulnerable groups; (d) developing the process of consultation and dialogue; and (e) proposing an approach for involving local people in project implementation.

IV.1. Community outreach and mobilization

For each zone inhabited by people or communities that could be affected, the project will establish appropriate mechanisms in the form of teams responsible for implementing the provisions of the process framework by drawing up actions plans that will include:

a) Dissemination of information, mobilization of stakeholders, and the creation and training of Local Development Committees (LDCs).

b) Collection and analysis of data on the specific ways in which resources are used and their social impacts;

c) Formulation of a management plan in collaboration with the LDCs;

d) Adoption of measures aimed at protecting the biodiversity of specific zones in cooperation with the LDCs and other actors.

In addition, components 2, 3 and 4 of the project provide for heavy involvement of the relevant populations in the entire process of preparing management plans for the pilot sites, in their implementation, and in their short- and medium-term evaluation.

The participatory approach will thus be the basis for all interventions having a direct or indirect impact on any population categories that live off the resources of the Gulf of Gabès.

IV.2. Creation of Local Development Committees (LDCs) and selection of Project Management Unit (PMU) representatives

In order to ensure community participation, the project will create Local Development Committees (LDCs) as needed (e.g., a PMU for each pilot site and thematic PMUs – primarily for fishing.) All population groups affected will be able to participate in these committees and will appoint certain of their members to represent them. Modalities will be developed to ensure that the interests of women, in particular, are represented in these committees.

For each zone, an interdisciplinary technical team composed of various specialists will be available to ensure that project interventions are being carried out and that the population is participating in their implementation. Depending on the situation, the team will include a sociologist/anthropologist, a community development specialist, and specialists in education and environmental outreach. Training of the staff of the PMU, and support for the implementation of the required studies and surveys to be performed, as well as for community organization activities, will be the responsibility of the executing agency for the project.

Additional GEF Annex 15: Social Assessment
TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

Social Assessment Summary

During project preparation, a social assessment was conducted that included visits to three of the proposed pilot sites (Kerkennah, Gabès and Bou Ghrara). This social assessment is intended as a preliminary investigation of the social foundations and modalities needed for participation and awareness building for biodiversity protection, and improvement of living conditions for the people in the project area. During the social assessment, extensive interviews and focus groups were held with the primary stakeholders, which includes managers of tourist hotels in the Gabès area, local industries (e.g. primary polluters in some instances), fishermen (e.g. both large-scale industrial and small-scale *artisanal*), and other smaller local industries. This annex summarizes the findings, conclusions and recommendations of the social assessment.

One of the crucial elements identified in the social assessment is the articulation between the local population and its elected officials: e.g. the local Development Committees (*Comités de Développement*), the project's management staff, and the administrative structure at the governorate level. There are major issues that require the intervention of the Government at the governorate level. One major issue is the responsibility for sewerage and gypsum pollution, because it is clear this issue can only be resolved at the state-wide level, and local communities and NGO's cannot do much to intervene, in spite of their awareness of the problem. Similarly, in the Governorate of Medenine, the crucial issue is the impact of the tourism industry along the coast of from the town of Gabès to the Dejrba – Bou Ghrara region. This zone provides one quarter of the total tourist availability in the country, its impacts on the coastal zone also require intervention from the national level with hotel industrialists and the individually affected communities in the region.

In other words, the need for participation, requires a level of integration not just at the local community level, but at the higher levels of Government and large financial stakeholders.

Participation of the local population of beneficiaries is an approach which has proven to be one of the essential building blocks to ensure the protection of degraded biodiversity resources and to balance the interests of long-term biodiversity conservation. The social assessment focuses on the populations' perceptions about the key causes of environmental degradation as well as the current practices and behavior, and the specific local actions required to protect marine and coastal resources. The social assessment also investigated the attitudes and conditions as well as readiness of the population to participate in the proposed project.

The social assessment, in addition to identifying the groups that would be potentially most affected by the project (both positively and negatively), also outlined the initial steps required to develop a truly participatory strategy. The strategy is based on the concept that the stakeholders must understand the project objectives and social development outcomes, so they can take an active part in the decision-making process; and that their ideas, approaches and solutions are taken seriously and incorporated into the design of the project - in particular into the design of the biodiversity management plans.

The findings of the social assessment show that there is unanimity among the stakeholders on the need to

protect the environmental resources against the key factors of biodiversity loss: illegal trawling especially by sea-bottom scraping boats, over-fishing, sewage pollution, gypsum pollution, and over-construction by the tourism industry. They argue that the challenge is to protect the marine resources while at the same time adding value to the existing resources through better management. The strong response on the part of the population and the NGOs is that there is an urgency for the Government to establish protective programs and to act quickly. Among the stakeholders participating in the focus groups it became clear that the problem is not a lack of will to assist in carrying out conservation programs, and to raise awareness by attending awareness and training sessions; but rather the need for the project management jointly with Government and communities to get the biodiversity management plans established quickly.

Training and education for participation in a project such as this requires not only the explanation of the project's rationale and objectives. Participation also needs to draw on the awareness currently held among many stakeholders about the key losses to maritime resources and to biodiversity, and knowledge about site-specific vulnerable areas such as Bou Ghrara. The key issues include not only illegal fishing practices, but the haphazard development of tourism on the coastline, particularly in Djerba and other project issues.

Beneficiaries expressed, nevertheless, a certain level of skepticism with the objective that local populations themselves would be associated in a technical project from its inception. Up to now, the existing organizations (existing development committees, other NGOs and Government institutions) have weak capacity and are organized in an ad-hoc fashion. They cannot see how they are going to be integrated collectively into the project activities. The creation of the local development committees in Gabès, Kerkennah and Bou Ghrara will demonstrate to the population not only that it is possible for these legal institutions to be created and recognized by Government, but also that it is urgent to generalize this approach to the rest of the project zone.

Recommendations

1. Due to the weak local capacity and skepticism about effective participation, the social assessment recommends that the plans for education, training and participation be among the first activities in the project in order to avoid missing the opportunities for participation, and lack of popular support later.
2. The social assessment recommends that the project make use of the resource people that are already familiar with the project to assist in the preparation of the initial training and education programs. This will gain time since they are experienced with the pilot sites, as well as the stakeholders and institutions.
3. The training required for participation should avoid as much as possible a formal classroom environment, suggesting instead that they follow traditional community meetings where anybody can have their say and pose questions. Most effective are small focus groups that together debate and reach consensus on a range of activities and responsibilities.
4. Technical and formal training can come later, the first activity is to ensure awareness of the project objectives and outcomes. For this issue, the role of the local development committees to build awareness for the participatory outcomes is critical. The membership of the local development committees should include local community leaders, freely elected community members, representatives of active NGOs, other local stakeholders (e.g. tourism, industry), and members from Government agencies. The Government representatives would serve as the critical interface between the local communities and higher institutional levels.
5. The monitoring and evaluation of socio-economic impacts would largely be linked to the number of sessions and number of participants in awareness and training programs, and the translation of community concerns into the management plans. Still the local development committees will also be able to do participatory monitoring and evaluation on the changes in quantity and quality of fishing, changes in revenues of the fishing community, number of jobs created and revenues from the eco-tourism sites under

implementation (Bou Ghrara, Kneiss Islands, and the sea grass area).
The determination of whether the project's management plans may require some limitation of access to sources of livelihood of the beneficiary population cannot be made at this time. Nonetheless it requires that all stakeholders as well as the implementing agencies and Government, be well informed about the Bank's Policy OP 4.12 and its requirements on maintaining livelihoods, and reporting on any changes to livelihoods. To ensure that the project will be implemented in accordance to the Bank's policy a Resettlement Policy Framework has been prepared by the Government, and found as acceptable to the Bank. In addition, as the management plans formulated, they should take into consideration the requirements of OP 4.12 to minimize any adverse impacts and provide compensation, if appropriate. This must be done at an early stage jointly with initial participation sessions that explain the specific planned actions for each pilot site. This is a process of education, not just giving out information that may be unfamiliar and misinterpreted, but it is a critical step in ensuring effective participation in the management plans.

Additional GEF Annex 16: STAP Roster Technical Review
TUNISIA: Tunisia: GEF: Gulf of Gabes Marine & Coastal Res. Prot.

STAP Review: Protection of the Marine and Coastal Resources of the Gulf of Gabès, Tunisia

Summary

Overall the project is well prepared and the documentation is well written. There are some weaknesses that can be addressed through modest revision of the project documentation. One of the main points that needs further clarification is the role of the private sector as a "stakeholder" and the contribution that this sector could make to the conservation of the ecosystems and renewable resource features of the coastal environment. Specific points concerning this issue and other areas where the project documentation could be strengthened are set out below based on the GEF standard structure for assessing proposals.

STAP Reviewer
Dr. Peter Raymond Burbridge
Professor Emertus, Scholl of Marine Science and Technology
University of Newcastle, UK

Scientific and technical soundness of the project

There is strong evidence of careful scientific assessment of the underlying problems associated with the conservation of the biological diversity of the Tunisian coat and specific target locations. The main threats to the coastal ecosystem and individual habitats have been assessed. There is sufficient ecological and technical information available to give the project a sound scientific base. Some important questions remain that will affect the design of project activities designed to conserve biodiversity such as, the actual causes of the decline of the Posidonia seagrass beds, that require further study. Appropriate studies are built into the project design and measures are planned to make effective use of the scientific information obtained in revising the initial proposals for improved ecosystem management.

Appropriate indicators have been identified to achieve the objectives and appropriate monitoring schemes have been incorporated into the design.

The participative approach taken in the project proposal should achieve the objectives of conserving biodiversity. The design recognizes the importance of developing both awareness of conservation issues and active participation of communities and other local stakeholders in the development of effective biodiversity conservation initiatives. However there are specific issues that need to be clarified concerning the role of the tourism industry in the development and implementation of the biodiversity management strategies, plans and management measures for specific locations. Brief mention is made of the "private sector", however the active participation of important stakeholders, such as hotel operators and other tourism related interests needs to be given a higher profile in the project design. Experience elsewhere has demonstrated the importance of getting the active involvement and support of the private sector in biodiversity conservation. Tourism development groups and hotel operators are identified in the background documents as key drivers of coastal habitat change, it is therefore very important to ensure their interests and potential capacities to support biodiversity conservation are incorporated. If this is not done, there is scope for resistance to and even and blocking of proposals by private sector bodies that

believe their interests are not being given the attention they deserve.
The active participation of fishers also needs to be given more prominence in the project design. Given that inappropriate and illegal fishing practices are identified as major contributing factors in the damage to habitats and decline in the populations of commercially valuable species, it seems inappropriate to wait until late in the project cycle to look further at the analysis of such practices (see logframe, component 3).

The project design is also biased towards a "top-down" approach. This may be justified in respect to the measures that the Government is instituting to control pollution and to develop institutional arrangements that give more emphasis to coastal management and conservation of biological diversity. However, the apparent weakness in the project design in respect to the under-emphasis on the role of the private sector and other interests that are active outside government agencies could lead to a risk of weak support for policies, plans and management interventions. The success of the proposed approach also depends heavily upon the effective cooperation of line agencies. Lack of cooperation and coordination among government agencies is a common problem in the management of coastal and marine areas and resources throughout the world. The measures to promote stronger cooperation among agencies could be further clarified and even reinforced in respect to how cooperation and coordination will be developed and reinforced. Consideration cold also be given to developing a sense of partnership between the government agencies and the private sector and other stakeholders in supporting the development of the project. This would help reduce the risk of poor coordination among agencies and would help to strengthen the sustainability of the project outcomes.

There do not appear to be any controversial aspects about the project.

The project does not introduce incentives that may lead to over-harvesting of resources and contain measures designed to improve conservation of habitats and the sustainable use of renewable resources.

It is not clear how any drops in revenue in the fisheries sector or the tourism sector resulting from any conservation measures proposed might be dealt with/compensated for. This element of the project design could be further clarified.

The legal instrument aspects in respect to international conventions, treaties and protocols are clearly spelt out in the background documentation and project concept. The project addresses weaknesses in the enforcement of existing national laws and regulations, and the measures proposed would help to ensure better use of these legal instruments.

The model of sustainable use outlined in the project will be tested and amended where appropriate and there are plans to use pilot management studies as a means of learning from and replicating the management model in other locations.

The proposed model has good prospects of success in the local pilot test areas. The success will depend heavily on support from stakeholders and the measures designed to improve cooperation and coordination among government agencies. These issues are addressed in the project design and the comments above suggest areas in which the design could be strengthened.

There is evidence that the project encompasses well thought through technical and socio-economic measures that should help the Government of Tunisia to develop long-term and sustainable solutions to the issues adversely affecting biological diversity.

Identification of global environmental benefits

Section 2.2 of the Project Concept directly addresses the goals of the GEF Operational Programme no. 2 and the recommendations of the Conference of parties of the Convention on Biological Diversity for the conservation and sustainable use of biological resources in coastal and marine ecosystems. The Project design aims to strengthen measures to reduce the impact of coastal development and over-exploitation of natural resources being implemented by the Government of Tunisia.

The global benefits for the conservation of biodiversity as interpreted by the COP of the CBD that will result from the planned interventions are primarily related to the improved management unique Mediterranean ecosystems which are becoming increasingly threatened by development, are rare, or are only found in Tunisian waters. The planned interventions should have a beneficial impact in terms of the importance of these ecosystems within the Mediterranean and specific species of global importance.

The project therefore fits well within the context of the global goals of GEF

Regional Context

The project addresses issues of importance to biological diversity conservation within the Mediterranean region by focussing on sites that are of representative of other parts of the region, or are unique to Tunisia but contribute to the overall biodiversity of the Mediterranean. The potential transboundary aspects of the proposed interventions could be more clearly set out in the project concept and design. For example, improving the conservation of the osideonia sea grass beds and beach systems in Tunisia may well help in the conservation of the marine turtle population of the region. It would be helpful if the project design incorporated measures to examine the potential for establishing management links with other countries where there may be a transboundary effect and the measures adopted in Tunisia could be extended to the wider region. Conversely, it would be beneficial to explore ways in which improved management in other countries could enhance/add value to the effect of the biological diversity conservation measures proposed for Tunisia.

Replicability of the project

There is good scope for the replication of the planned activities in other parts of Tunisia and potentially in other parts of the Mediterranean based on the experience gained and lessons learned during the life of the project. In this context, it would be useful to give more emphasis to the exchange of information and experience gained through the project with other countries in the region. Perhaps the UNEP/UNDP supported Mediterranean Action Plan may offer a vehicle for broader communication and sharing of results

Sustainability of the project

There appears to be good potential for continuation of the changes the project aims as the project design incorporates measures for both local participation and, for human resources development and institutional strengthening which complement the Government's policies and management priorities.

Secondary issues

Linkage to other focal areas

The project design appears to be consistent with the stated operational strategies of the other focal areas and avoids negative impacts in focal areas outside the focus of the project. The proposed project activities appear feasible and cost-effective, and should contribute to global environmental benefits in other focal areas and in the cross-sectoral area of land degradation.

For example, the project addresses terrestrial land degradation and nearshore marine water quality issues in a manner that complements the Government's investment in industrial and urban wastewater treatment. Improved management of tourism and recreation development in the coastal zone and proposed actions to reduce the impact of inappropriate fishing activities all complement the actions of the Government and add value to those actions in improving conditions for aquatic biodiversity conservation.

Linkage to other programmes and action plans at the regional or subregional level

The project seeks to build upon past, ongoing and prospective GEF activities. The project design could be strengthened by making more explicit mention of how the planned activities would be coordinated with work of other GEF projects and their respective Implementing Agencies and other bodies. This should include how links would be established with relevant ongoing regional or sub-regional programs and action plans.

Other beneficial environmental effects

The project seeks to improve the management of coastal and marine ecosystems of importance to more than one sector of the Tunisian economy. The planned measure should help reduce conflicts among agencies and economic entities seeking to maximize their respective use of the coastal and marine resources base. Improved management of protected areas may also yield other ecosystem services to the region and to local communities.

The project does give some emphasis to the development of eco-tourism. However, the potential negative impacts that may result from eco-tourism could be given greater recognition in the project design.

Degree of involvement of stakeholders in the project

Stakeholder involvement is incorporated as part of the "participative" nature of the planned activities. This addresses GEF emphasis on the development of activities to promote community-based management of biodiversity. Giving greater emphasis to the role of the private sector, specifically tourism, and recreation, could strengthen the project design and commercial fisheries as mentioned above. The project could also elaborate on the use of concepts such as the co-management of resources, or contracts or negotiations with Government that define each stakeholders responsibility in managing the resource, and the eventual devolution of biodiversity management measure to local groups and NGOs.

Capacity building aspects

The project design does give a clear exposition of measures to strengthen awareness and basic expertise to support biological diversity conservation. However, the project design would benefit from further clarification of the measures to promote and maintain cooperation between the various groups of

stakeholders, and transparent mechanisms to ensure the active participation of relevant stakeholders in the development, implementation and monitoring of project activities.

RESPONSE TO STAP REVIEWER COMMENTS

The Project team appreciates the work of the STAP reviewer and is pleased with the positive response to the Project design. The Project will still go through an appraisal process involving discussions with the Tunisian authorities before final Project submission to GEF and the Bank Board. Some specific comments provided by the STAP reviewer are addressed below.

Comment: Some important questions remain that will affect the design of Project activities designed to conserve biodiversity, such as the actual causes of the decline of the *Posidonia* seagrass beds, that require further study.
Response: Agree. Despite the fact that the *Posidonia* meadows are very productive ecosystems and that the seagrass beds in the Gulf of Gabès are considered as the most extensive in the Mediterranean, data on the historic coverage is limited, as well as data on the extent of and major causes for degradation. Inventories and mapping of the Posidonia meadows are part of the Project activities and are necessary for the development of any conservation measures.

Comment: There are specific issues that need to be clarified concerning the role of the tourism industry in the development and implementation of the biodiversity management strategies, plans and management measures for specific locations. Brief mention is made of the "private sector", however the active participation of important stakeholders, such as hotel operators and other tourism related interests needs to be given a higher profile in the Project design.
Response: We agree that the active participation and support from stakeholder groups are key to successful Project implementation. The tourist sector is a major cash earner in the local economy. On one hand development of the sector is a major contributor to the degradation of coastal areas, but on the other hand it is based on the beauty and resources of the coast and could become an important player in biodiversity conservation. The participation mechanisms to better integrate tourism stakeholders will be addressed by an additional social study now underway, with emphasis on tourism stakeholders in the Bou Ghrara region. This will be finished shortly and integrated into PAD document.

Comment: The active participation of fishermen also needs to be given more prominence in the Project design.
Response: We agree that the participation of fishermen is essential since the sector is a major contributor to the degradation of the marine environment by destructive fishing methods, as well as to decrease marine productivity. The involvement of fishermen in the development and enforcement of management measures to protect the fisheries resources is essential, but not always easy to accomplish. The additional social study mentioned above will also include fishing sector stakeholders.

Comment: The Project design is biased towards a "top-down" approach.
Response: The Project tries to involve a wide range of governmental agencies at national and local levels, and fit into the existing governmental structure. However, the participatory approach is a key element in the development of biodiversity management plans and capacity building activities. The additional social study which is underway would further address the participation of other stakeholder groups, and draw upon lessons from preceding GEF Projects.

Comment: It is not clear how any drops in revenue in the fisheries sector or the tourism sector resulting

from any conservation measures proposed might be dealt with/compensated for.
Response: This is an important issue. By involving the stakeholders from the beginning in the development of any resource management plans and measures, it is expected that they would realize that the Project objective is a sustainable use of the resources which would benefit themselves. However conservation measures, such as restricted fishing zones, can of course cause conflicts which will be addressed in conjunction with World Bank social safeguard policy on this issue. (Bank Operational Policy 4:12 : Involuntary Resettlement).

Comment: It would be useful to give more emphasis to the exchange of information and experience gained through the Project with other countries in the region.
Response: The conservation methods and measures developed for these marine and coastal protected areas will be useful for other proposed marine protected areas in the region. Extensive dissemination activities are planned as part of the Project, including a documentation center, GIS system and international and regional workshops.

Comment: The Project design could be strengthened by making more explicit mention of how the planned activities would be coordinated with work of other GEF Projects and their respective Implementing Agencies and other bodies.
Response: Agree. Another GEF Project on Protected Area Management is under implementation in Tunisia. Although this Project covers forest and wetland protected areas, the experiences of the implementing and involving agencies will be available to this Project, especially with regards to participatory mechanisms.

Comment: The Project design would benefit from further clarification of the measures to promote and maintain cooperation between the various groups of stakeholders, and transparent mechanisms to ensure the active participation of relevant stakeholders in the development, implementation and monitoring of Project activities.
Response: Sustained stakeholder participation is key for successful implementation. The Project aims to set up Local Development Committees to ensure the concerns and participation of local stakeholders. At the National level, a Management Committee would ensure coordination between relevant agencies and authorities. In addition, a participation strategy with specific mechanisms for participation will be carried out.