Document of
The World Bank

Report No: ICR00002667

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(Project ID: P069460 -- Trust Fund No.TF54942)

ON A
CREDIT

IN THE AMOUNT OF US$ 6.31 MILLION

TO THE

GOVERNMENT OF TUNISIA

FOR A

GULF OF GABES MARINE AND COASTAL RESOURCES

PROTECTION PROJECT (P069460)

2 June 2013

MNSEN
Tunisia
MENA

CURRENCY EQUIVALENTS

Currency unit = Tunisian Dinar

TD 1.0 = US$ 0.74 (at appraisal)
US$ 1 = TD 1.3 (at appraisal)

TD 1.0 = US$ 0.64 (at ICR)
US$ 1 = TD 1.54 (at ICR)

Weights and Measures : Metric
Fiscal Year of the Borrower/Recipient : from 01 January to 31 December

ABBREVIATIONS AND ACRONYMS

APAL	Coastal Planning and Protection Agency *Agence de Protection et d'Aménagement du Littoral*
CAS	Comtry Assistance Strategy (World Bank)
CITET	International Center for Technology and the Environment of Tunis *Centre International des Technologies de l'Environnement de Tunis*
DGEQV	General Directorate of Environment and Quality of Life *Direction Générale de 1'Environnement et la Qualité de Vie*
EMP	Environmental Management Plan
GEF	Global Environment Facility
GEO	Global Environmental Objective
GIS	Geographic Information System
ICR	Implementation Completion Report
ISR	Information Status and Results.
INSTM	National Institute of Sciences and Marine Technologies *Institut National des Sciences et Technologies de la Mer*
MAE	Ministry of Agriculture and Environment *Ministère de l'Agriculture et de l'Elevage*
ME	Ministry of Environment (*Ministère de l'Environnement*)
M&E	Monitoring & Evaluation
NGO	Non-Governmental Organization
PAD	Project Appraisal Document
PAD	Project Appraisal Document
PDO	Project Development Objective
PMU	Project Management Unit (central level)
POU	Project Operational Unit (in Gabes)
SEE	Strategic Environmental Evaluation
UNDP	United Nations Development Program
WB	World Bank

Vice President:	Inger Andersen
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ICR Team Leader:	Taoufiq Bennouna

COUNTRY
Tunisia

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D A T A S H E E T

A. Basic Information			
Country:	Tunisia	Project Name:	Gulf of Gabes Marine and Coastal Resources Protection Project
Project ID:	P069460	L/C/TF Number(s):	TF-54942
ICR Date:	06/02/2013	ICR Type:	Core ICR
Lending Instrument:	TAL	Borrower:	GOVERNMENT OF TUNISIA
Original Total Commitment:	USD 6.31M	Disbursed Amount:	USD 4.79M
Revised Amount:	USD 6.31M		
Environmental Category: B		**Global Focal Area: B**	
Implementing Agencies: Agence de Protection et d'Amenagement du Littoral (APAL) Centre International des Technologies de l'Environnement de Tunis (CITET) Direction Générale de l'Environnement et de la Qualité de la Vie (DGEQV) Institut National des Sciences et Technologies de la Mer (INSTM)			
Cofinanciers and Other External Partners:			

B. Key Dates				
Process	**Date**	**Process**	**Original Date**	**Revised / Actual Date(s)**
Concept Review:	02/11/2003	Effectiveness:		
Appraisal:	09/02/2004	Restructuring(s):		
Approval:	03/10/2005	Mid-term Review:	01/12/2009	01/08/2009
		Closing:	06/30/2010	12/31/2012

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Moderately Satisfactory
Risk to Global Environment Outcome	Substantial
Bank Performance:	Moderately Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance			
Bank	**Ratings**	**Borrower**	**Ratings**
Quality at Entry:	Moderately Satisfactory	Government:	Moderately Satisfactory
Quality of Supervision:	Moderately Satisfactory	Implementing	Moderately Satisfactory

		Agency/Agencies:	
Overall Bank Performance:	Moderately Satisfactory	**Overall Borrower Performance:**	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	**Indicators**	**QAG Assessments (if any)**	**Rating**
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA):	Moderately Satisfactory
GEO rating before Closing/Inactive status	Moderately Satisfactory		

D. Sector and Theme Codes

	Original	**Actual**
Sector Code (as % of total Bank financing)		
General agriculture, fishing and forestry sector	30	30
General public administration sector	20	20
General water, sanitation and flood protection sector	50	50
Theme Code (as % of total Bank financing)		
Administrative and civil service reform	14	14
Biodiversity	29	29
Environmental policies and institutions	14	14
Participation and civic engagement	29	29
Water resource management	14	14

E. Bank Staff

Positions	**At ICR**	**At Approval**
Vice President:	Inger Andersen	Christiaan J. Poortman
Country Director:	Neil Simon M. Gray	Theodore O. Ahlers
Sector Manager:	Charles Joseph Cormier	Inger Andersen
Project Team Leader:	Taoufiq Bennouna	Allan Rotman
ICR Team Leader:	Taoufiq Bennouna	
ICR Primary Author:	Angelo Bonfiglioli	

F. Results Framework Analysis

Global Environment Objectives (GEO) and Key Indicators(as approved)

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

Revised Global Environment Objectives (as approved by original approving authority) and Key Indicators and reasons/justifications

(a) GEO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Cumulative scores based on the Management Effectiveness Tool for the biodiversity management plans at the six pilot sites			
Value (quantitative or Qualitative)	No	Yes		Yes
Date achieved	06/30/2005	03/31/2012		12/31/2012
Comments (incl. % achievement)				
Indicator 2 :	One long-term strategy for an integrated approach to biodiversity protections prepared that addresses scientific, social and economic issues, including replication of biodiversity management plans			
Value (quantitative or Qualitative)	No	Yes		1
Date achieved	06/30/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)				
Indicator 3 :	Necessary resources (i.e. human, financial institutional and infrastructure) included in 11th and 12th National Plans			
Value (quantitative or Qualitative)	No	Yes		Yes
Date achieved	06/30/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)				
Indicator 4 :	Baseline data collected and key indicators for marine fish species and habitats identified			
Value (quantitative or Qualitative)	No	Yes		Yes
Date achieved	06/30/2005	12/31/2012		12/31/2012

Comments (incl. % achievement)				
Indicator 5 :	Baseline data collected and key indicators for water quality identified			
Value (quantitative or Qualitative)	No	Yes		Yes
Date achieved	06/30/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)				
Indicator 6 :	Scientific monitoring reports on trends for key indicators for two years			
Value (quantitative or Qualitative)	No	Yes		Yes
Date achieved	06/30/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	Fully achieved. 4 scientific reports were elaborated. Unplanned GIS web integrating information from project activity and study results was elaborated			
Indicator 7 :	A system for timely and reliable monitoring of biodiversity resources established by 2010			
Value (quantitative or Qualitative)	0% of baseline data collected, and 0% of key indicators identified for marine fish species and habitats and water quality	Scientific reports on key indicators for the last 2 years of the project - 4 reports total.		The 4 scientific reports were elaborated. Unplanned GIS web integrating information from project activity and study results was elaborated
Date achieved	06/30/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	115%			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Number of Project Management Unit (PMU) and Project Operational Unit (POU) staff in place			
Value (quantitative or Qualitative)	2	12		14
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments	116%			

(incl. % achievement)				
Indicator 2 :	Fiduciary reports submitted -updated procurement (annual) and financial project audit (annual)			
Value (quantitative or Qualitative)	0	10		15
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	150 % due to the 2 project extended closing dates			
Indicator 3 :	Long-term strategy for biodiveristy conservation in the Gulf of Gabes prepared			
Value (quantitative or Qualitative)	0	1		1
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	100%			
Indicator 4 :	Number of training sessions carried out and number of attendees (as per semi-annual reports)			
Value (quantitative or Qualitative)	0	33 training sessions (250 trainees)		40 training sessions (1413 trainees)
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	121 % for Number of training sessions carried out and 565% for Number of attendees of training sessions			
Indicator 5 :	Reports (i) on water quality Djerba Zarzis and (ii) Inventories for native and alien marine fish, and strategy for ballast water management prepared			
Value (quantitative or Qualitative)	0	5		4
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	80 % - Report on water quality Djerba Zarzis was not completed - Inventory of native and alien marine fish, and management of ballast waters was completed in May 2012 - Inventory on marine species was completed in March 2012			
Indicator 6 :	Impacts of fishing on biodiversity and a manual of good practice for fishing prepared			
Value (quantitative or Qualitative)	0	1		1
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	100 %			

Indicator 7 :	Satisfactory biodiversity management plans completed			
Value (quantitative or Qualitative)	0	6		6
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	100% 5 biodiversity management plans prepared for Kneiss, Jerkennah, El Bibane Boughrara and Gabes Oasis. A sixth management plan was prepared for the marine seagrass pilot site (South-East of Kerkennah)			
Indicator 8 :	Biodiversity management plans satisfactorily implemented during the project period			
Value (quantitative or Qualitative)	0	3		3
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	Three management plans were implemented in Boughrara (construction of visitors' center), Kneiss (bird-watching facility), and Kerkennah pilot site.			
Indicator 9 :	Annual report on local development commitees activities			
Value (quantitative or Qualitative)	0	5		5
Date achieved	03/10/2003	12/31/2012		12/31/2012
Comments (incl. % achievement)	100%			
Indicator 10 :	Local Development Committees formed			
Value (quantitative or Qualitative)	0	6		5
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	Only 5 Committees have been created in the areas where biodiversity management plans were prepared, because in the sixth one (Kerkennah site) there is no resident population.			
Indicator 11 :	Annual report on local development committees activities (indicator not included in the PAD)			
Value (quantitative or Qualitative)	0	5		5
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)	100%			
Indicator 12 :	Baseline significant posidonia (sea grass) areas identified			
Value (quantitative or Qualitative)	No	Yes		Yes
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments	100%			

(incl. % achievement)				
Indicator 13 :	Report detailing satisfactory participation of stakeholders semi-annual report			
Value (quantitative or Qualitative)	0	1		1
Date achieved	03/10/2005	12/31/2012		12/31/2012
Comments (incl. % achievement)				

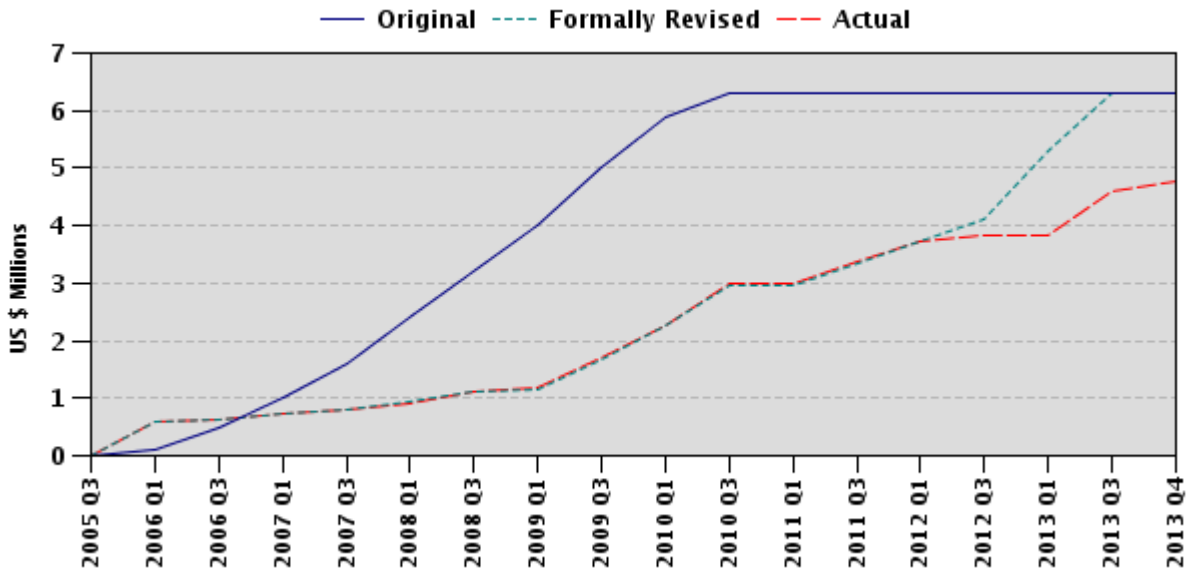
G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	GEO	IP	Actual Disbursements (USD millions)
1	04/27/2005	Satisfactory	Satisfactory	0.00
2	09/03/2005	Satisfactory	Satisfactory	0.60
3	03/06/2006	Satisfactory	Satisfactory	0.64
4	11/30/2006	Moderately Satisfactory	Moderately Satisfactory	0.72
5	04/25/2007	Moderately Satisfactory	Moderately Satisfactory	0.80
6	08/03/2007	Moderately Satisfactory	Satisfactory	0.92
7	02/03/2008	Satisfactory	Satisfactory	1.08
8	12/29/2008	Satisfactory	Satisfactory	1.37
9	06/27/2009	Moderately Satisfactory	Moderately Satisfactory	2.14
10	12/28/2009	Moderately Satisfactory	Moderately Satisfactory	2.26
11	06/29/2010	Moderately Satisfactory	Moderately Satisfactory	2.99
12	11/08/2010	Satisfactory	Satisfactory	2.99
13	03/29/2011	Satisfactory	Moderately Satisfactory	3.38
14	10/05/2011	Satisfactory	Moderately Satisfactory	3.73
15	06/29/2012	Moderately Satisfactory	Moderately Unsatisfactory	3.84
16	12/31/2012	Moderately Satisfactory	Moderately Unsatisfactory	4.20

H. Restructuring (if any)

Not Applicable

I. Disbursement Profile



1. Project Context, Global Environment Objectives and Design

1.1 Context at Appraisal

1. The Golf of Gabes, a Mediterranean zone with important biological resources and rich coastal, marine and freshwater ecosystems, is particularly exposed to anthropogenic factors (including over-fishing and sea-bed trawling and wastewater pollution from urban and industrial sources) altering its natural features. Since the beginning of the 2000s, the Tunisian government, fully aware of the potential and the challenges of this zone, had stressed the importance of adopting a pragmatic and integrated approach aimed at safeguarding natural resources, including land and water conservation, mitigating on-going or potential threats to biodiversity, and addressing social and environmental concerns, while contributing to better harmonizing planning with other investment programs and projects.

2. At the time of project conception and appraisal, the key issues were the following:
   (i) Resulting from the National Biodiversity Strategy, the government of Tunisia had already started to initiate actions in a range of areas, but particularly focused on environmental management infrastructure as a consequence of industrial and urban waste and pollution;
   (ii) Pollution was just one of the factors responsible for the decline in biodiversity; action in other areas was required to halt the worsening situation in biodiversity; Some sectors such as tourism were being given special emphasis by the government but this created environmental and biodiversity issues for which there were no management or mitigating plans;
   (iii) While there were huge areas with decimated biodiversity but which offered scope for rehabilitation, there were others which were pristine and needed to be preserved as such and required appropriate management plans. Authorities were aware of the long-term shrinkage of the sea grass bed, but did not have sufficient scientific data to understand the ecological processes taking place;
   (iv) Biodiversity conservation and development initiatives were generally considered to be mutually exclusive; there was a need for an integrated approach to sustainable development while conserving biodiversity, and this required a bundle of development strategies based on an integrated and participatory approach; and
   (v) There was a clear consensus that there was a need for capacity building at all levels in the governmental structures and also in the community to deal with biodiversity conservation issues. It was in this context that the project was prepared and appraised.

3. By preserving the biological resources through conservation areas (to be set up and strengthened) and planning for sustainable use of resources, comprising integrated objectives for conservation of biological diversity, productive uses and socio-economic development, the project therefore intended to 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.

4. The project was built upon several Government policy instruments on environment, biodiversity and social development, particularly the ‘National Strategy for the Protection of the Environment and Sustainable Development’, the ‘National Action Plan for the Environment’ (NEAP) and ‘the National Strategy and Action Plan for Biodiversity’. It stressed the need for greater institutional attention to integrate water and natural resources

management issues in a more efficient and sustainable manner, while highlighting the participation of beneficiary communities and users in rural areas, therefore contribution to strengthening efficient and decentralized local investments.

5. **Rationale for Bank Involvement**. The project design and implementation greatly benefitted from the World Bank and GEF added value and experience, to rapidly launch activities to protect biodiversity that might not have been funded as a short-term budget priority, and support decentralized participatory management plans to protect biodiversity of global value that would have not been part of Government priority activities. Main aspects of the rationale for Bank involvement were the following:

a) Funding: the issues relating to biodiversity conservation were critical at that juncture but government had difficulty in allocating funds to this agenda; the GEF project could provide funds to leverage government contribution;
b) Participatory planning and management, including monitoring: this was a new concept in Tunisia, and one which would require considerable capacity building and stakeholder participation, an area in which the government had limited experience; and
c) International experience: GEF would bring scientific knowledge and approaches used elsewhere in the world in similar situations which could be very rewarding.

6. The project directly supported the Tunisia CAS. It aimed at ensuring that social and environmental objectives (CAS Outcome 1.4, within Objective No.1) were properly addressed. The project was also clearly addressing the requirements of the two key pillars of GEF: (a) biodiversity conservation in protected areas; and (b) mainstreaming biodiversity in production through integrated approaches to development. The project intended to contribute to safeguarding natural resources including land and water conservation and 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.

1.2 Original Global Environment Objectives (GEO) and Key Indicators (*as approved*)

7. The PDO/GEO was to establish a functional integrated monitoring and participatory management system for the project area to manage biodiversity degradation in the Gulf of Gabes region.

8. The project did not intend to actually initiate actions to reduce a decline in biodiversity generally as the project period of five years was too short to see any significant result in this area over larger territories. Instead it intended to generate a broad strategy for sustainable management of biodiversity in the Gulf of Gabes; a strategy for some key sectors and participatory approaches; and a strategy for managing some key causes of biodiversity decline, all of which were to be amenable to replication in other parts of Tunisia in the post-project period. The project as also expected to develop and implement an integrated system for biodiversity monitoring in the project area.

(i) *Management of biodiversity was to be measured by*:
   (a) Scores on "Management Effectiveness Tracking Tool" for the biodiversity management plans
   (b) One long-term strategy for an integrated approach to biodiversity protections prepared that addresses scientific, social and economic issues, including replication of biodiversity management plans";

(c) Necessary resources (i.e. human and financial) included in the 11th and 12th National Plan; and;
(d) Other strategies for biodiversity management developed, such as management of invasive species from ballast water disposal, management of chemical spillovers, and sustainable fishery.

(ii) *Functional biodiversity monitoring system was to be measured by:*
(a) Baseline data collected and key indicators for marine fish species and habitats identified;
(b) Baseline data collected and key indicators for water quality identified;
(c) Baseline significant seagrass beds areas identified;
(d) Scientific monitoring reports on trends for key indicators for two years; and
(e) GIS developed and a functional Information Exchange Center established which integrates project generated technical, bio-diversity and socioeconomic data, and other existing non-project data for easy access.

(iii) *Participatory approach to biodiversity management as measured by:*
(a) Training sessions carried out at various levels - government/policy makers, enforcers of regulations, other stakeholders, including the community and CSOs;
(b) Report detailing satisfactory participation of stakeholders;
(c) Local Development committees formed; and
(d) Six site-based biodiversity management plans prepared in a participatory manner (including one in the marine pilot site).

1.3 Revised PDO/GEO (as approved by original approving authority) and Key Indicators, and reasons/justification.

9. The PDO and the GEO have not been changed since Board Approval of the Project. Key indicators were not changed.

1.4 Main Beneficiaries

10. The project was designed to directly benefit communities that exploit coastal marine resources at the various sites chosen, comprising first and foremost fishermen, farmers in the Gabes 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).

1.5 Original Components

11. The project, whose budget was estimated at US$9.81 million, of which US$6.31 were funded by a grant from the Global Environment Facility (GEF), and approximately US$3 million financed by the Government of Tunisia), comprised four components, with related sub-components and activities.

a) **Component 1 (US$3.94 million):** Institutional strengthening, strategic planning and dissemination, including a Project Management Unit (PMU) and Project Operational Unit (POU); quality control and valuation for project activities; and long-term strategy to protect biodiversity.
b) **Component 2 (US$1.35 million):** Training and capacity building aimed to strengthen human resources for project management, technical, scientific and public participation skills to improve management for biodiversity. It included: training on managing marine and coastal biodiversity and developing project management skills;

public awareness initiatives for target communities, local stakeholder; training and capacity building for Government agency staff to help enforce biodiversity protection provisions in marine and coastal regulations; socio-economic surveys of target populations and other stakeholder groups; and preparation of a participatory methodologies for local development committees and other stakeholders to ensure incorporation of participation into biodiversity management.

c) **Component 3 (US$1.20 million):** Baseline marine data acquisition and applied biodiversity monitoring to acquire and update the technical scientific data needed for biodiversity management plans, and then monitor key scientific project performance indicators. It included hydrodynamic and water quality studies for the Gulf of Gabes; inventories and monitoring of marine and lagoon fish species of regional and global interest; inventories and monitoring of alien species and their distribution within the Gulf; a regional management strategy to address ballast water disposal and alien species; and evaluation of biodiversity impacts from fishing fleets and preparation of guidelines recommending changes to fishing practices to ensure biodiversity sustainability.

d) **Component 4 (US$3.32 million):** Participatory biodiversity management plans to prepare sustainable biodiversity management plans for six pilot sites and implement them in the three priority sites. All plans, included a participatory preparation of a general methodology for the participatory biodiversity management plans; preparation and implementation of the management plan for the sea grass area; inventories and mapping of the marine plant cover to fill the existing data gaps and widen the existing baseline data; monitoring network for significant sea grass areas; Implementation of six management plans; and a Geographic Information System (GIS) to serve as a database for the Information Exchange Center.

1.6 Revised Components

12. The initial components were not changed.

1.7 Other significant changes

13. Aside from some reallocations of funds from one component to another (see below), no major changes were made to the project (as stated in the original PAD). However, the closing date, which originally was on 30 June 2010, was subsequently revised to 31 March 2012 and then again to 31 December 2012 to make up for the two-year delay incurred in start-up of project activities and additional delays because of social unrest in Tunisia at the beginning of 2011.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

14. **The project was based on sound background analysis**. Overall, the project was based on a sound background analysis, on important international conventions and treaties ratified by the Government (including the 'Ramsar Convention', Desertification Convention and Convention on Biological Diversity), as well as on several Government policy instruments such as the following:

- The 'National Strategy for the Protection of the Environment and Sustainable Development' (defining priority areas and actions to be undertaken),
- The 'National Action Plan for the Environment' (NEAP)

- The' National Strategy and Action Plan for Biodiversity' (whose priorities included, among others, improving scientific knowledge and improving the protection and management of crucial ecosystem, as well as strengthening institutions and regulations, and
- The 'National Tourism Strategy", which relates to a sector that generates major revenue but also threatens biodiversity, especially in coastal areas.

15. The project was also innovative in: (i) expanding the scope of the traditional land-use plans for sensitive coastal areas implemented by the APAL; (ii) introducing the concept of 'integrated' management of ecosystems (a notion used in the Mediterranean area only from 2008 onwards); and (iii) building a functional integrated monitoring and participatory management system to manage biodiversity degradation through a range of scientific studies, evaluations and assessments.

16. **The project background analysis was generally adequate**. The project, prepared at the request of the Government of Tunisia, was designed on the basis of available information about the scale and magnitude of the actual situation of marine ecosystems and potential threats, and committed financial support by the Government. The project consisted mainly of TA activities, whose scope and nature were well defined, with only a few small structures to be built or rehabilitated at the three priority sites. The project contributed to social mobilization and sensitization of institutional actors on key biodiversity and conservation-related issues.

17. **Lessons learned and reflected in the project design**: The project design took into account lessons learned from two GEF-financed projects in Tunisia to protect biodiversity, both offering important lessons on coordinating the efforts of the agencies involved: (i) the 'Protected Areas Management Project' (GEF/World Bank), and (ii) the 'Regional 'Conservation of Wetlands and Coastal Ecosystems in the Mediterranean Region' Project (GEF/UNDP). Both projects, carried out through the same agencies (DGEQV and APAL), offered important lessons on coordinating the efforts of the agencies involved. These were, in turn incorporated into the current project design, particularly in relation to: the importance of stakeholder participation, ensuing clarity of objectives and components, incorporating past experience, identification and management of risks, effective monitoring and evaluation. Moreover, a new technique to monitor implementation progress was adopted, based on international experience.

18. **Assessment of project design**. The main themes and issues identified by the project were adequate. Objectives and components were in line with the Government of Tunisia's objectives with regard to biodiversity conservation. The project also took into account the diversity of real challenges faced by the fishery sector (in terms of pollution, for instance), particularly the need for social sustainability by promoting sustainable natural resource use by local communities and supporting nature-based tourism in and around protected areas. Pilot sites were selected because of their importance for sustainable development, and because their piloting management plans could be replicated elsewhere along the Tunisian coast. Finally, the participation of local communities was intended to foster the entire approach. However, the following weaknesses should also be highlighted:

Institutional arrangements

- The design of institutional arrangements led to complex and laborious procedures with four different implementing agencies (despite the fact that during preparation the

absence of integration between the departments had been emphasized). The PAD and, especially, the Grant Agreement comprised very detailed procedures and mechanisms that somehow prevented forms of inter-agency collaboration (ex. different rates of government's contributions were applied to the different components) and flexibility during implementation.

Other weaknesses

- More consideration, time and effort would have been necessary to implement innovative participatory project activities (which were supposed to cover different sectors and required biodiversity management plan preparation for six sites, and implementation in three sites). Community participation focused on capacity building, but did not address the real participation of local communities in decision-making processes`, except in 2012 but time was very short to really improve community participation.
- Timing for the implementation of the different activities was unrealistic, particularly given predictable delays in procurement procedures.
- The design lacked adequate mechanisms and resources to build on lessons learned and mainstream them into planning (to ensure sustainability).
- Some budget lines were inadequate or erroneously calculated.

19. **Assessment of risks and their mitigation**. The two key risks that were under-estimated were: (a) ensuring public participation; and (b) procurement procedures. Although mitigation measures were recommended and indeed implemented, these were clearly inadequate to mitigate the two identified risks.

20. **Adequacy of government's commitment, stakeholder involvement, and/or participatory processes**. The project was developed on the basis of Tunisia's commitments to global and regional biodiversity conservation as evidenced by its ratification of key international conventions ('Combat Desertification', 'Biological Diversity'). At the national level, project preparation also benefitted from collaboration between different national ministerial departments and scientific institutions. Furthermore, it should be pointed out that no QAE was carried out for the project.

2.2 Implementation

21. The most important factor contributing to the delayed and incomplete implementation of the project was the social unrest and political changes in Tunisia that put implementation behind by more than 18 months.

22. The Project was not fully operational for at least two years after Board approval. The 2009 Mid-Term evaluation was focused on addressing this 24 month-delay (and stressed the importance of institutional arrangement-related issues and lack of procurement capacities) and formulated some recommendations in this regard (but did not suggest major restructuring). The project implementation was accelerated mainly during its last year during which the most results were delivered. Specific implementation-related problems were the following:

- As a direct result of the institutional arrangements of the project, the four components were managed by the four implementing agencies as quasi-autonomous 'sub-projects' with minimal interactions (each component/agency having its own budget, specific procurement procedures, action plans, chronograms, and hierarchical reporting). For example, there was little coordination between CITET-related social mobilization

initiatives for Component 2 and APAL-supported preparation of local management plans for Component 4.

- The project Steering committee was not efficient, because of too many participating institutions, inadequate knowledge of the project by its participants, and rarity of meetings. The Steering committee therefore failed to act as a multi-sectoral institution providing overall policy guidance to the project, and acted sporadically only as a simple network to exchange and discuss information and define potential synergies.
- Project implementation was negatively affected by turnover of key resource persons, jeopardizing staff stability and continuity of work. More particularly, over the course of implementation, the project had four national directors, two project coordinators and three coordinators of the Gabes-based POU.

23. ***Project restructuring.*** The project team demonstrated a range of reactions to the project design. The team seized opportunities to make some changes in terms of reallocation of funds, adding a couple of additional studies, and initiating actions for formulating a communication strategy (although it could have better used the MTR's recommendations and improve institutional arrangements and indicators). There were no major changes in terms of components, of agencies involved in the implementation of the various activities or of institutional arrangements.

24. However, in addition to postponing twice the closing date, the following financial restructuring measures were taken:

- Funds initially planned for activities of component 3.b relating to consultants for CITET and APAL were transferred to category 4.a (capacity building for development committees (about US$350,000). These reallocations, which had to be made because of some inaccuracies in original budget allocations, were considered necessary in order to implement planned activities.
- Tunisian authorities requested in June 2011 (and subsequently obtained) a restructuring of the GEF contribution, with the transfer of the responsibility of studying the impact of industrial fishing on biodiversity of the Gulf of Gabes from INSTM to DGEQV.

25. To overcome some design-related shortcomings and improve adaptation to changing conditions, a range of activities were added during implementation, such as the following:

- A study on environmental feasibility of industrial development in Skhir.
- An assessment of management efficiency of pilot locations (through tracking tools).
- A synthesis report on project achievements, followed by Plan of Action addressing priority initiatives to be implemented by key stakeholders.
- The creation of an internal committee in charge of synthesizing project achievements and formulate a comprehensive communication strategy in order to mainstream lessons learned into sectoral development plans. This led to various activities aimed at improving project visibility (such as publication of the synthesis report, creation of a Web site, organization of a workshop on project sustainability).
- A revision of the capacity building plan in order to integrate new topics identified during implementation (such as Environmental and Social Assessment (ESA) and ornithology-related issues).

26. Moreover, some activities which had initially been planned were actually dropped (such as the social and environmental assessment of the tourism industry because it was not considered to be part of the mandate of the Ministry of Environment). These changes had no substantial impact on the achievement of the project's objectives.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization.

27. An M&E system had been elaborated by an external consultant (recruited by the DGEQV between 2007 and 2010). Subsequently, as the performance of the consultant was not considered satisfactory, the emphasis was put on the preparation by each of the implementing agencies of timely comprehensive reports (including use of tracking tools) even in the absence of an M&E specialist. By using their own M&E systems, implementing agencies appropriately evaluated their data and extensively used them to assess achievements and constraints, and inform decision-making and resource allocations.

28. Original performance indicators were used. However, an optimal ratio between qualitative and quantitative indicators seems to have been a permanent challenge during implementation.

2.4 Safeguard and Fiduciary Compliance.

29. ***Environmental and Social Safeguard.*** The Project was classified as category B. It triggered Environmental Assessment (OP 4.01) - the Government had prepared an Environmental Management Plan (EMP) - and Involuntary Resettlement (OP/BP 4.12) - the Process Framework having addressed the potential restriction of access to resources, although the potential effect on livelihoods had not been determined. During project formulation, an *Environmental Management Plan* (EMP) had described three major mitigation measures through (i) management plans to avoid environmental impacts, (ii) participation of stakeholders to incorporate their knowledge about local threats to biodiversity, and (iii) environmental monitoring of key indicators of fish species, habitat, water quality and significant areas of *Posidonia oceanic/* seagrass. During project preparation, several workshops were held with local stakeholders who proposed mitigation and monitoring measures which were subsequently incorporated into the project design. In June 2012, the project launched a 'Social and Environmental Evaluation' of project activities, including the formulation of environmental management plans (PGE) for the construction works of the Boughrara visitor center and of activities in the artificial reefs south of Kerkennah Islands. These plans, to be eventually implemented with the participation of local population, were discussed during a workshop held in Gabes and the reports posted in the ministry's Web site.

30. In terms of social safeguard, key initiatives during implementation were the following:

- Creation of and support to local development committees in each of the pilot sites,
- Active participation of local stakeholders in reviewing, discussing and validating project's documentation (minutes of large meetings)
- Participation of local stakeholders in discussion concerning management plans of selected pilot sites
- Local NGOs' involvement in formulating micro-projects in a participatory manner.
- Evaluation of social aspects of project initiatives (in compliance with the Bank's safeguard policies).

- Organization of training sessions on social and environmental safeguard policies by CITET. [1]

(b) Financial management.

31. The four executing agencies had acceptable staff capacity, accounting and internal control system. The project did not use a computerized accounting system and each executing agency prepared its financial statements on Excel sheet and then submitted them to the PMU for the consolidation of the overall project financial statements.

32. Audits were conducted annually by CGF (*Contrôle Général des Finances*), reports were delivered to the Bank, and revealed no particular accounting issues.

(c) Disbursement.

33. At the end (revised closing date of 31 December 2012), only 73% of the Grant had been disbursed. At the end of the grace period (end of April 2013), the total amount disbursed was however equivalent to 75% of the Grant which means that US$4,790,000 of the total commitment of US$ 6,310,000 had been utilized.

(d) Procurement:

34. The project experienced several difficulties during procurement implementation, and in response, the Bank sought to provide continuous and regular support to advise implementing agencies on tailoring procurement arrangements effectively to the country and project conditions. In general, the implementation of procurement activities by the four implementing agencies was inconsistent because: (i) each agency had its own practices and mechanisms, (ii) some staff in charge of procurement functions had unsatisfactory procurement qualifications, (iii) the Bank's guidelines and procurement arrangements set forth in the Grant Agreement were at times misinterpreted or misunderstood, and (iv) the cumbersome superposition of both Bank's and Government's procurement procedures prevented efficient and timely implementation of procurement activities. This has resulted in the cancellation of two works contracts that were supposed to be implemented by APAL with a total amount of about US$ 0.9 million.

35. Moreover, the project has experienced some contract management deficiencies especially within the framework of the '*Hydrodynamic and water quality studies for the Gulf of Gabes*' and '*Inventories and monitoring of marine and lagoon fish species*' which were implemented by INSTM. By project completion, INSTM was unable to settle a dispute with and between the two consulting firms involved in the study.

2.5 Post-completion Operation/Next Phase

36. Key project activities had been designed to continue after project completion, with replication in Tunisia and elsewhere in the Mediterranean region. Main activities were

[1] It should also be pointed out here that no major civil work was undertaken under this project. Moreover, the activities related to the trigged safeguards policies were achieved in compliance with the project ESMF.

supposed to be the following: (a) implementation of management plans at other pilot sites, (b) identification of other seagrass areas in the Gulf to be managed with the biodiversity principles and monitoring techniques piloted during the project; and (c) application of participatory approaches and use of scientific knowledge, monitoring techniques and project key performance indicators in other Tunisian ecosystems.

37. Today, at completion, these challenges are still pertinent. The project has contributed to creating the conditions necessary to meet a number of important challenges, particularly the following:

- Formulation of sustainable strategic approaches for long-term biodiversity management not only in the Gulf of Gabes, but also in other similar ecosystems (in Tunisia and, possibly, elsewhere).
- Development and dissemination (publications, Web sites, etc.) of highly valued scientific knowledge.
- Development of a range of best practices and planning tools.
- Establishment of a sustainable system of knowledge management and sharing.
- Collection of a corpus of legal and regulatory texts related to biodiversity management in Tunisia.
- Strengthening of institutional capacities of key implementing agencies.
- Identification of conditions required to strengthen the mandates of national institutions involved in ecosystem management and biodiversity conservation.
- Adequate estimation of the technical, scientific, human and financial resources required to reach a sustainable level of effort to protect biodiversity resources.
- Identification of the most relevant environmental and social issues.
- Adequate levels of sensitization of local stakeholders (including civil society) on environmental issues.
- Improved general awareness of the importance of participatory mechanisms for planning and implementing development initiatives, in the context of new overall democratic trends of Tunisian society.[2]
- Creation of a network of scholars, practitioners, civil society associations, and NGOs around biodiversity issues in Tunisia, in general, and in the Golf of Gabes, in particular.
- Elaboration of tools to sustain planning and capacity building initiatives.

38. Important uncertainties affect the potential institutional sustainability of some of the activities which have been initiated (particularly in terms of implementation of biodiversity management plans within a clear legal and institutional framework and integrated approach to biodiversity protection). The project has contributed to creating new dynamics at the local level and raising expectations of local institutional actors. It will be important not to lose the momentum in order to ensure and consolidate sustainability of the gains achieved. Some promising openings have recently been made by APAL in terms of ensuring, in collaboration with DGEQV and INSTM, a short/mid-

[2] For instance, because of the new democratic dynamics, Local Development Committees (LDCs) were reshaped in order to better reflect real representatives of local stakeholders and its members were better enabled to articulate their needs and priorities.

term support to a regional operational unit in order to address key issues (such as sustainable institutional setting, social mobilization, implementation of integrated management plans, financial resource mobilization, monitoring of *Posidonia* sea grass etc.). On a longer-term, the forthcoming World Bank/GEF 'Oasis project' would focus on some of the key issues raised by the project and adopt its best practices and lessons learned.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation.

Rating*: Substantial*

39. **Relevance of objectives**. The PDO continues to remain highly relevant. The integrated and participatory approach is indeed the best way to promote a balanced and sustainable approach to biodiversity conservation and development. The project is still in line with the Bank's current support to Tunisia as outlined in the Interim Strategy Note (ISN, FY13-14) aimed at (i) laying the foundations for renewed sustainable growth and job creation; (ii) promoting social and economic inclusion; and (iii) strengthening governance: Voice, Transparency and Accountability. The project is also in line with key current national policies and development strategies, particularly because of a new national emphasis, since the 2011 January 'revolution', on participation of local stakeholder in decision-making processes.

40. **Relevance of design.** The general design reflected proper diagnosis for a development approach bringing together environmental and development issues and fostering dialogue, partnership and collaboration among diverse national and regional institutions. Very pertinently, the project specifically dealt with the complex nature of biodiversity protection, emphasizing the need to improve the knowledge base and introduce the notion of 'integrated' and 'participatory' management. However, the development of individual management plans should have been accompanied by and incorporated into an overall legal and institutional framework (a kind of 'regional master plan' or '*schéma directeur régional*). Also as discussed elsewhere, the project design involved a complicated institutional set up that would lead to complex processes and coordination issues.

41. **Relevance of Implementation.** Implementation arrangements which allocated responsibilities for project components across four agencies without succeeding in achieving collaboration and coordination between them did not set a model for replication.

3.2 Achievement of Project Environmental Objectives. Rating: *Substantial*

42. This section of the ICR describes general achievements of the project, on the basis of the main elements of the PDO/GEO i.e. (i) manage biodiversity degradation in the Gulf of Gabes region; (ii) a functional integrated monitoring system; and (iii) participatory approach. For more detailed presentation of the components, sub-components and activities see Annex 2.

(i) Management of biodiversity

43. Five management plans have been prepared for the Kneiss, Jerkennah, El Bibane Boughrara and Gabes Oasis. A sixth management plan was also prepared for the marine seagrass pilot site (South-East of Kerkennah). This included an important and comprehensive baseline inventory and mapping of most of the *Posidonia seagrass* areas and marine plant cover in the Gulf of Gabes. Main recommendations of these plans, most of them being replicable to other parts of Tunisia, are presented in the Table below.

Table: Major recommendations from the biodiversity management plans

LOCATION	MAJOR RECOMMENDATIONS
Kerkennah Islands	Ensuring equitable and managed urban development Improving infrastructures Managing water resources in a sustainable manner Exploiting mining resources in a sustainable manner Revitalizing and normalizing the fishing industry Reorganizing and developing the agriculture sector Diversifying touristic options Ensuring ecosystems services Develop cultural heritage and landscape
Kneiss Islands	Protecting terrestrial fauna and flora Defining the conditions for a rational use of natural resources Enhancing social and economic development
Boughrara	Managing halieutic resources in a sustainable manner Protecting lagoon and marine ecosystems Protecting coastal ecosystems Fostering local development and ecotourism Promoting participation of local population to natural resource management
Elbibane	Supporting sustainable management of the fishing industry Protecting lagoon and marine ecosystems Promoting participation of local population to natural resource management Managing pressure of urban areas
Gabes	Protecting natural heritage (droughts, soil degradation, water and soil salinization, hydric and eolian erosion) Rationalizing human activities (against overexploitation of biologic resources, chaotic land clearing, pollutions) Improving legal frameworks for environmental protection Improving institutional organization and knowledge base

44. The outcomes of these pilots are now incorporated into a national level longer-term biodiversity conservation strategy with appropriate actions and strategies for replication. This would concern, for instance, the following elements: (a) definition of the institutional and legal tools aimed at managing natural resources (including in protected areas) in an integrated manner; (b) establishment of a system aimed at monitoring and improving the knowledge on ecologic and socio-economic dynamics; and (c) development of resource sustainable management systems, through economically profitable projects aimed at improving local livelihoods. Although only one of the three pilot plans was implemented under the project (infrastructure could not be created in the other two sites), the overall management of the pilot sites was improved (as indicated by the development outcomes measured by the GEF tracking tool).

45. Strategies were also prepared for management of invasive species, sustainable fishing practices, and management of ballast water. Among the key recommendations of the studies, the following are particularly important: preventing use of fishing trawlers in shallow waters, and defining the conditions conducive to the adoption of the concept of 'biologic recovery'. The major objective of the ballast water management plan produced

by the project is to promote coordinated measures and efforts to control and monitor introduction of species through ballast and ships' sediments. Key strategies to achieve this objective are the following: (a) improving national institutional and legal frameworks; (b) strengthening national capacities to manage ballast water and controlling potential introduction of non-native species; (c) collecting relevant and reliable scientific data for decision making processes; (d) establishing international mechanisms aimed at improving cooperation and exchange of information; and (e) defining technical documentation codes of conduct for management et decision-making. Concerning the introduction of invasive species (considered worldwide as the second source of pollution), a comprehensive report produced by the project identifies all the exotic species in the Golf of Gabes, and provides detailed information about the conditions leading to their introduction and distribution, and their essential eco-biologic characteristics and abundance. Ultimately, the inventory is likely to be used to consider the invasive and competitive status of these taxa.

46. Finally, the project developed an integrated approach to sustainable development and biodiversity conservation through demonstrations at the seagrass site. In this regard, three scientific monitoring reports on trends (marine fauna and flora, exotic and invasive species, and posidonia seagrass) were produced.

47. Cumulative scores were complemented by the "Management Effectiveness Tracking Tool" for the biodiversity management plans. The tracking tools for biodiversity projects aimed at measuring progress in achieving the impacts and outcomes established at the portfolio level under the biodiversity focal areas (tracking tools are applied at CEO endorsement, at project mid-term, and at project completion). The assessment of the effectiveness of the management of the three sites performed in 2009, 2010 and 2012 showed a marked improvement in management efficiency: in Kneiss, 37 points in 2009, 40 points in 2010 and 49 points in 2012; in the islands of Kerkennah, 20 points in 2009, 34 points in 2010, and 46 points in 2012; and in the Boughrara Lagoon, 16 points in 2009, 32 points in 2010 and 45 points in 2012.

48. The main improvements include, in particular: (i) *Research, Knowledge and Management of Natural Resources*, the improvement could be attributed to the diagnosis made in the development of the management plan as part of the project to protect coastal and marine resources and the consultation process, training and capacity building undertaken during the development of the plan; (ii) *Development of the Legislative Context*: this has been driven by the adoption of the Law on Marine and Coastal Protected Areas in 2009. The Kneiss site was selected as a potential candidate for a future classification; (iii) *Physical and Delimitation*: A clear focus has been agreed during the consultation process for expanding the protected area to include, for instance, salt marshes and mudflats that are part of the Kneiss ecosystem; and (iv) *Management and Planning*.

49. A strategy for sustainable eco-tourism, fishery concession, and a model for participatory preparation and management of bio-diversity have been prepared. The strategy, including plans for replication of biodiversity management plans, was based on the results of four different reports prepared on water quality in Djerba; the inventory of native and alien marine fish; and a strategy for ballast water management. The strategy includes nine strategic axes and a total of 23 objectives (each axis comprising between one and six objectives). Strategic axes were the following: restoring degraded ecosystems; ensuring sustainable and equitable use of natural resources; protecting

unaltered ecosystems; establishing a clear environmental regulatory framework; ensuring consistency among governmental programs, economic development and biodiversity protection: knowledge development, management and sharing; education and social mobilization; improved governance; and synergy among the three United Nations' Conventions.

50. An integrated approach to sustainable development and bio-diversity conservation was demonstrated based on the selected sea-grass site. Prior to the preparation of biodiversity management plans, an initial concept note had been prepared to address underlying institutional and legal concepts and issues. A feasibility study of a management plan for *Posidonia* area was prepared (in spite of very slow and laborious procurement procedures). Although the planned construction of anti-trawling structures was eventually dropped (as procurement conditions had not been met), the study was highly relevant and useful and its results are now available to the government for implementation.

51. Key recommendations concerned the scaling-up, replicability and utilization of the findings and conclusions of the studies and analyses are as follows. Particularly important are the following elements: support to adequate social mobilization initiatives aimed at improving local awareness on environmental issues; use of adequate technologies and practices (such as those related to the protection of *Posidonia* sea grasses); development and adoption of the concept of 'biologic recovery'; and institrutional measures aimed at prohibiting fishing trawlers in shallow waters).

52. Furthermore biodiversity management was improved by the achievement of a range of unintended results

- Support to the would-be potential inscription of the oasis of Gabes onto the UNESCO World heritage list (the site has already been included in a tentative list and was visited by UNESCO resource persons).
- Support to the inscription of Akarit humid areas on the list of the 'Ramsar protected areas'.
- Support to the categorization of some of the project pilot sites as protected areas within the context of the implementation of a law concerning marine and coastal zones (2009).
- Support to initiatives aimed at obtaining financial resources for the creation of a management unit in charge of the North-Eastern part of the Kerkennah Islands (in the context of a project supported by Italian cooperation).

(ii) Establish a functional integrated monitoring system (Substantial)

53. The project had an actual impact ***on monitoring biodiversity***. Under the responsibility of the INSTM, key outputs were achieved, such as: (i) identification of baseline key indicators for marine fish species and habitats; (ii) identification of baseline key water quality indicators; and (iii) submission of three scientific monitoring reports on trends (marine fauna and flora, exotic and invasive species, and posidonia seagrass). A major report on hydrodynamic and water quality studies for the Gulf of Gabes was not completed due to a legal dispute with external contractors).

54. More particularly, three inventory/monitoring systems were carried out to determine the trends and their implications for bio-diversity: of lagoon and marine species, of alien species, and of the distribution of these species within the Gulf of Gabes.

55. A key aspect of the monitoring system was the creation of a GIS and Information Exchange Center, to serve as a database of project information (scientific information, technical information, socio-economic information) for the Information Exchange Center with user-friendly access, which was integrated with relevant information from other Tunisian ministries. Important actions have been taken relating to the establishment of the GIS and the creation of some sort of a web-based browser system. The system integrates project generated technical, bio-diversity and socioeconomic data, and other existing non-project data for easy access; Creation of two Web portals containing project-related data bases, namely: (i) a Web site (located at the Ministry of Environment) [3] with interactive information and general data on the area and detailed information on activities, studies, assessments and management plans prepared within the context of the project; and (ii) a GIS Web (hosted by APAL), with scientific data and maps. [4] All these documents are publicly available to students, researchers, and specialized NGOs and institutions, through the project website. Also, the INSTM is (i) preparing international scientific publications to disseminate widely the results of these studies, and (ii) using these data as inputs in its own research projects.

(iii) Establish a participatory approach to biodiversity management (Modest)

56. The project defined and developed ***a participatory approach to biodiversity management*** through: (a) the achievements of the GIS (see above); and (b) different aspects of the bio-diversity monitoring work (including identification of indicators, generation of baselines, and collection and interpretation of data following the creation of the baselines on two three specific areas - invasive species and marine flora/fauna, and water quality).

57. Different capacity building initiatives, which were implemented at various levels (training and public awareness campaigns on environmental issues through the services of local NGOs), highly improved local stakeholders' understanding of major threats to local biodiversity and emphasized key community-based initiatives (participatory preparation of five site-based biodiversity management plans)

58. Five committees have been formed and were operational in each of the pilot sites. The creation of and support to these Committees was supposed to ensure incorporation of participatory principles into biodiversity management and to avoid the risks of top-down approaches, by favoring and enhancing a participatory approach to ecosystem management (whereby local communities were supposed to appoint their representatives).

3.3 Efficiency

59. It is important here to acknowledge that, because of the the nature of the project (mainly technical assistance for studies, evaluations and management plans) and the intangibility of its activities traditional measures of efficiency (as applicable and practical) are not relevant.

60. The economic efficiency of the PDO is based on the following elements:

- General costs involved in achieving project objectives (preparedness) were reasonable in comparison with both benefits and recognized norms ("value for money"). For example, the financial cost of the scientific studies (first time that such detailed

[3] www.golfegabes.com
[4] http://www.apal.nat.tn

scientific studies have been carried out in Tunisia) is very low compared to the economic value of the generated databases and knowledge generated. Similarly, the methodology used to develop biodiversity management plans has been refined during the project implementation period in order to develop relevant plans with lower costs than those prevailing at the start of project.

- Practices, technologies and techniques, which have been identified and are expected to improve biodiversity conservation, are cost-effective (e.g. artificial reefs), mainly because they are based on both national scientific knowledge and traditional know-how.
- Cost-effective scientific principles introduced by the project have already been and are likely to be still further integrated into key national strategies.
- The project opted for a cost-effective institutional scenario by empowering the DGEQV for overall coordination, without creating a new (and costly) institutional entity.
- The project was also cost-effective because of its selectivity in targeting specific geographic areas where relatively high levels of biodiversity could be maintained, adopting site-specific protection measures, focusing on already existing environmental protection infrastructure, on major areas where posidonia sea grass had declined over decades, ; and putting major efforts into the preparation of management plans for a limited number of pilot sites.

61. Other indirect non-quantified and non-quantifiable economic benefits of the project can also be identified:

- Economic outcomes of local user groups well sensitized on environmental issues (for a more sustainable use of ecosystems)
- Positive economic outcomes deriving from improved efficiency and effectiveness of public services (participating departments and agencies) through capacity building activities.
- Positive social externalities, such as: participation of grassroots organizations (eventually leading to the improvement of their fishing and agricultural practices); and (ii) capacity building of ministerial departments' officials.
- Positive environmental externalities, such as inventories of species, mapping of sensitive sea grasses, inventories of birds, and the like.

62. Finally, in terms of efficiency, the project would have been more robust if: (i) timely social mobilization and sensitization measures had been put in place at earlier stages; and (ii) capacity building on procurement procedures had been enhanced and maintained.

3.4 Justification of Overall Outcome Rating: *Moderately Satisfactory*

63. Overall, the project is rated moderately satisfactory for the following reasons:: (i) the project was *relevant* (objectives were fully consistent with the country's development priorities, the design was appropriate and key outputs were delivered), although the implementation suffered from some delays; (ii) the project was *effective* (objectives were substantially achieved both in terms of biodiversity management and integrated monitoring), however, there were some shortcomings in terms of the adoption of truly participatory approaches and (iii) the project was *efficient* in terms of the general cost-effectiveness of its focus on specific potentially sensitive coastal and marine areas.

64. it is worthwhile to indicate that (a) the additional time required was due to extraneous factors; (b) even with the delay, almost all of the outputs were delivered well within the overall project cost as anticipated at appraisal; and (c) given the nature of the project outputs (knowledge generation and development of replicable models, among other things), there was no impact in terms of delayed monetary or financial benefits emanating from the project.

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

65. The project has conducted socio-economic surveys of targeted populations and other stakeholder groups, prepared participatory methodologies, and set up local development committees (LDCs) to ensure incorporation of participatory principles into biodiversity management.

66. More indirectly, it can be pointed out that the project had an impact on poverty reduction, mainly because Gabes's marine and coastal ecosystems provide a livelihood to a large population of the three Governorates of Gabes, Sfax and Mednine - estimated at about 1.7 million people (16% of total national population), of which about 0.5 million economically active people. The project did not include a specific 'gender' approach, although various sensitization and social mobilization initiatives targeted women and women's groups.

(b) Institutional Change/Strengthening

67. The operation had intended and positive effects and impacts on institutional development, particularly longer-term capacities of some institutions at national level.

68. The processes of identifying, planning, implementing and monitoring the various activities of the project helped revitalize technical line departments, strengthening their relationships with other sectors. They also contributed to fostering the implication of user groups of coastal and marine ecosystems. Overall activities of Component 2 were aimed at building the capacities of key institutional stakeholders. Moreover, it should be pointed out that:

- In terms of quality control and evaluation for project activities, the project provided a focused technical assistance to DGEQV to formulate long-term strategy to protect biodiversity, and therefore acquire an expertise in that area.
- INSTM was exposed to international expertise by being involved in baseline marine inventories and applied monitoring.
- The project aimed at expanding the scope of the traditional land-use plans for sensitive coastal areas implemented by the APAL.

(c) Other Unintended Outcomes and Impacts

69. The project contributed to achieve unintended positive outcomes, i.e., outcomes that, while causally linked to its interventions, allowed for additional achievements (see above on the achievement of unintended results in biodiversity management).

4. Assessment of Risk to Development Outcome. Rating: *Substantial*

70. At present, some risks might hinder the project's outcomes from being maintained. In the current situation of political transition and institutional volatility prevailing in Tunisia, no adequate arrangements are in place to help avoid or at least mitigate negative impacts

linked to the closing of the project (although interesting discussions were held, in this regard, during the ICR preparation). Indirectly, a range of measures would be needed in order to provide benefits in the short, medium and longer term, and mitigate corresponding risks:

- Government commitment and support to the general objective of the project: The risk is *Substantial* in the current situation of political transition. Through an adequate local level institutional set up, functions and mandates played so far by the POU (advocacy, social mobilization of local stakeholders) will have to be maintained and ensured.
- Local technical agencies' involvement in biodiversity protection: The risk is *Substantial*. The project contributed to greatly enhancing awareness of biodiversity-related issues at the level of national institutions and improving the knowledge base. However, each implementing agency was and is still operating in isolation, with minimal interaction. Because of the integrated nature of eco-systemic issues, new forms of collaboration and synergy will have to be defined and put in place.
- Local stakeholder ownership and importance given to biodiversity-related issues at local level: The risk is *Moderate*. Awareness of environmental issues and of necessary related technologies and practices (such as those related to the protection of *Posidonia* sea grasses, the concept of 'biologic recovery', the interdiction of fishing trawlers in shallow waters, and the like) is generally high as a result of social mobilization initiatives supported by the project.

71. Main mid-term and longer-term challenges are the following:

- Keep the momentum, by maintaining key human and financial investments to ensure adequate application of identified strategies, use of guidelines, and implementation of management plans.
- Define adequate and comprehensive legal frameworks supporting the implementation of individual management plans.
- Allow researchers and development practitioners to participate in international and sub-regional networks (research and development) to share knowledge on scientific issues and best development practices for biodiversity management and sustainable development.
- Define concrete ways of using guidelines and monitoring systems in similar ecosystems in Tunisia (and elsewhere in the sub-region).

5. Assessment of Bank and Borrower Performance

5.1 Bank. *Rating: Moderately Satisfactory*

72. The rating concerns the extent to which services provided by the Bank (i) ensured quality at entry of the operation, and (ii) supported effective implementation through appropriate supervision toward the achievement of development outcomes.

(a) Bank Performance in Ensuring Quality at Entry Rating: *Moderately satisfactory*

73. Services provided by the Bank ensured sound quality at the entry of the operation. The project was designed according to a number of correct strategic choices, taking a pragmatic approach integrating technical choices within existing institutional settings. In spite of some shortcomings, mainly in terms of institutional arrangements, project design was overall sound. The Bank identified and facilitated the preparation and the appraisal

of the operation in order to favor and facilitate the achievement of planned development outcomes in a way that was consistent with the Bank's fiduciary role.

(b) Quality of Supervision *Rating: Moderately Satisfactory*

74. The Bank proactively identified and resolved threats to the achievement of relevant development outcomes and the Bank's fiduciary role. ISRs and supervision missions were conducted and organized regularly. [5]

75. Effective implementation of activities was supported by bi-annual supervision missions, which produced detailed aide memoirs. Implementation support was provided through regular and efficiently managed audio and video-conferences (in order to regularly assess progress and identify bottlenecks). Audio/video conferences were organized when political and social unrest did not allow regular supervision missions. One weakness is linked to the fact that, between 2004 and 2012, four successive TTLs have been involved in project supervision, with different focus and sensitivities (some, for instance, stressing the need of a strict adherence to the institutional arrangements as initially planned in the PAD and others favoring greater flexibility). Finally, concrete implementation-related issues (for instance, the complexity of the institutional arrangements) could have been addressed by a timely project restructuring.

(c) Justification of Rating for Overall Bank Performance *Rating: Moderately Satisfactory*

76. The Bank's performance is considered moderately satisfactory. At earlier stages, some adjustments could have been made in order to adapt some procedural regulations and no-objection procedures to the characteristics of the project, to stress some capacity building needs, and to clarify/modify institutional arrangements to provide overall strategic coordination of the project.

5.2 Borrower: *Rating: Moderately Satisfactory*

(a) Government performance: *Rating: Moderately Satisfactory*

77. Overall the Government ensured quality of preparation and implementation, and complied with covenants and agreements toward the achievement of development outcomes. However, the steering committee was not operational, and this did not facilitate key decisions, which could have had positive impact on project implementation.

(b) Implementing Agencies Performance. Rating: *Moderately Satisfactory*

78. The project was implemented by four agencies, each of them with different implementing capacities:

- For DGEQV and CITET, respectively in charge of the implementation of Component 1 and Component 2, the rating is *Satisfactory*, because major activities were achieved with only minor problems.

[5] It should be pointed out here that QAG had reviewed QoS and rated it has 'Moderately satisfactory'.

- For INSTM, in charge of activities (studies, assessments, and inventories) of Component 3, the rating is *Moderately Satisfactory*, due to the fact that some activities were not fully completed, mainly because of procurement-related issues.
- For APAL, the rating is *Moderately Satisfactory*, because several activities were not achieved due to procurement issues.

(d)* Justification of Rating for Overall Borrower Performance: Rating: *Moderately Satisfactory

79. Overall the Government ensured quality of preparation and implementation, and complied with covenants and agreements toward the achievement of development outcomes. However, the steering committee was not operational, and this has not facilitated key decisions, which could have had positive impact on project implementation. Therefore, the proposed general rating of the Borrower is *Moderately Satisfactory*.

6. Lessons Learned

80. A number of positive and negative lessons can be drawn from the project experience (these lessons have general applicability for similar operations in the subsector). General key lessons learned are the following:

- Involvement of the community is essential to ensure that ownership and commitment to development efforts is maintained and that biodiversity management plans respond to real needs. The inclusion is necessary to focus efforts more on people who need to benefit most, and to strengthen the quality of outcomes. This process can be supported by social baseline studies (critical analysis of local livelihoods and identification of local perceptions and priorities) as well as the creation of appropriate entities (such as Local Development Committees). Interaction and linkages among planners and stakeholders are also important in fostering camaraderie, which in turn fosters better stakeholder collaboration.
- A complex and rigid implementing arrangement does not provide the flexibility critical for testing of new models, quick results and maintaining political and operational independence for piloting innovative approaches.
- More efficient procurement organization and procedures might avoid some serious delays in project implementation. Frequent training in the Bank's procurement procedures during implementation is necessary to avoid delays in procurement aspects.
- Adequate project staff, with precise ToR and appropriate experience should have adequate knowledge of all the elements of the Grant Agreement and PAD, as well as of Bank procedures (particularly procurement procedures) and baseline data should be collected prior to the startup of the activities.
- Implementation and supervision performances could be greatly impacted by the instability of TTLs. As presented in the ICR, the frequent change of key staff and mainly the project managers has prevented the project from being smoothly implemented and has even contributed to undermining the impact of the previous TTLs' efforts. For effective project implementation, it is critical to have continuity in leadership in order to sustain the pace of implementation overtime as well as provide continuous direction and encouragement to staff to work toward achieving project outcomes.

- An effective steering committee could greatly facilitate key decisions and positively impact on project implementation.

7. Comments on Issues Raised by Borrower/Implementing Agencies / Partners

81. Representatives of the Recipient and implementing agencies have analyzed a preliminary short version of the present ICR. Overall they accepted its key elements, including proposed rating, main conclusions and recommendations, although some elements were marginally disputed. They have also proposed some corrections and clarifications (some of them have been integrated into this revised version of the document). Annex 7 synthesizes key elements of the national ICR.

ANNEXES

Annex 1. Project Costs and Financing

(a) Project Cost by Category (in US $ million equivalent)

Gulf of Gabes marine and coastal resources protection project - P069460					
Component	**Appraisal Estimate US$ millions**	**Actual US$ million 31/12/2012**	**Percentage of Appraisal**	**Payments at 03/04/2013**	**Percentage of Appraisal**
Component 1: Institutional strengthening, strategy and dissemination	3.94	4.32	110%	4.61	117%
Component 2 : Training and capacity building	1.35	0.70	52%	0.84	62%
Component 3: Baseline marine data acquisition and applied biodiversity monitoring	1.20	0.89	74%	0.89	74%
Component 4: Participatory biodiversity management plans	3.32	1.84	55%	1.97	59%
Unallocated					
Total	**9.81**	**7.75**	**79%**	**8.31**	**85%**
Total project costs	9.81	7.75	79%	8.31	85%
Project Preparation Fund					
Front-end fee IBRD					
Total financing required	**9.81**	**7.75**	**79%**	**8.31**	**85%**

(b) Financing

Gulf of Gabes marine and coastal resources protection project - P069460						
Source of Funds	**Type of Financing**	**Appraisal Estimate (US $ millions)**	**Actual Estimate 31/12/2012 (US $ millions)**	**Percentage of Appraisal**	**Payments at 03/04/2013**	**Percentage of Appraisal**
Borrower		3.50	3.80	109%	3.84	110%
GEF TF	Grant	6.31	3.95	63%	4.47	71%
Total		**9.81**	**7.76**	**79%**	**8.31**	**85%**

Annex 2. Outputs by Component

Output by Component	Baseline	Projected Target	Results at Project Completion (31/12/2012)	Rate of Achievement
Outcome indicators				
1. A system for integrated and sustainable management of biodiversity resources established by 2010	0	5 plans prepared. 3 plans implemented. Completion of long-term biodiversity strategy. Allocation of resources in 12th Nat. Plan.	5 plans prepared. 3 plans implemented. Completion of biodiversity strategy. Adequate resources allocated in 12th National Plan.	100%
2. A system for timely and reliable monitoring of biodiversity resources established by 2010	0	Scientifc reports on key Indicators 4 reports	Atlas 4 Reports Unplanned GIS Web	150%
Intermediate outcome indicators				
Component 1: ***Institutional strengthening, strategic planning and dissemination***				
An efficient project management structure is operational at local and regional levels (PMU & POU staff)	2	12	14	116%
Fiduciary reports submitted - updated procurement (annual) and financial project audit (annual)	0	10 (2 per year)	15 (due to project extension)	150%
A strategy to strengthen institutional framework to effectively manage marine and coastal biodiversity resources in the Gulf of Gabes in the long-term	0	1	1	100%
Component 2: ***Training and capacity building***				
Number of training sessions carried out and number of attendees	0 0	33 sessions 250 attendees	40 sessions 1413 attendees	121% 565%
Number of local development committees put in place	0	5	5	100%
Component 3: ***Baseline marine data acquisition and applied biodiversity monitoring***				
Reports on water quality Djerba; Inventory of native and alien marine fish; and strategy for ballast water management	0	5	4	80%
Impacts of fishing on biodiversity and a manual of good practice for fishing prepared	0	1	1	100%
Component 4: ***Participatory biodiversity management plans to prepare sustainable biodiversity management plans***				
Preparation of 5 biodiversity management plans	0	5 sites	5	100%
Works to protect marine	0	1	0	0%

biodiversity completed in the experimental site (South of Kerkennah)				
Mapping of Posidonia seagrass	0	1	1	100%
Number of biodiversity management plans implemented	0	3	1	33%
Works to protect marine biodiversity completed in the site	0 0	1	0	0%
Annual report on local development committees activities	0	5	5	100%
Cumulative scores ("Management Effectiveness Tracking Tool" for the biodiversity management plans	0	3	3	100%

The achievements under the four technical components of the project are as follows:

Component 1 (Institutional strengthening, strategic planning and dissemination) was *Satisfactory* in supporting the PDO. Under the direct responsibility of the DGEQV, key objectives of putting in place PMU and POU staff, submitting fiduciary reports and formulating a long-term strategy for sustainability were achieved.

- *At central level*, a Project Management Unit (PMU) ensured supervision and coordination of activities, supported the creation of the project steering committee (made up of representatives of numerous ministerial departments and other national institutions more or less involved in project implementation), and created a central committee to monitor project activities (*Comité de suivi de la convention de partenariat*), made up of representatives of the four implementing agencies. The monitoring committee seems to have worked in a quite satisfactory manner (through focused monthly meetings). On the contrary, more problematic was the functioning of the Steering committee.
- *At regional level*, a 4-person Project Operational Unit (POU), located in Gabes provided the technical capacity to supervise implementation of all project activities and ensure participation of local stakeholders in preparing management plans. Between PMU and POU, the units included 6 people at PMU level, 2 at DGEQV, 1 at CITET, 1 at INSTM, and 2 at APAL. A total of 15 fiduciary reports were prepared and submitted. Moreover, the PMU assumed the responsibility of preparing a strategy to strengthen the institutional framework to effectively manage marine and coastal biodiversity resources. The PMU achieved a number of additional, unplanned activities: (i) study on the impact of pollution on biodiversity; (ii) social and environmental assessment of the project; and (iii) preparation and publication of a general synthesis of the project (approach and results), and creation of a Web site aimed at sharing approaches, methodologies, reports and studies with a large audience. [6]

[6] www.golfegabes.com

Component 2 (Training and capacity building) was *Satisfactory* in supporting the PDO. Under the responsibility of the CITET, key outputs have been achieved, such as: (i) carrying out training sessions and (ii) preparing semi-annual reports. The project held 40 training and capacity building session aimed to strengthen human resources for project management, technical, scientific and public participation skills to improve management for biodiversity. Over 1500 people attended these training sessions. Moreover, in order to facilitate the participation of local stakeholders, 5 local development committees were put in place in different participating sites. The training program were achieved with inclusion of new themes; sensitization tools were prepared and disseminated (including posters, brochures, and interactive CDs); scholarships were provided to students whose dissertation topics were closely related to biodiversity issues; and a study tour was organized to Italy (within the context of the Mediterranean initiative of integrated management of coastal areas). A comprehensive sensitization program was defined and implemented (including awareness-raising on environmental issues through the services of local NGOs). Specific activities addressed legal dimensions of biodiversity protection (including publication of a *corpus* of existing legal regulations and organization of training sessions and national workshop). Socio-economic studies were carried out at the beginning (baseline study) and at the end of the project (centered on local perceptions).

Component 3 **(**Baseline marine data acquisition and applied biodiversity monitoring**)** was *Moderately satisfactory* in supporting the PDO (it could have been rated 'Satisfactory' with better financial management capacities. Under the responsibility of the INSTM, key outputs were achieved, such as: (i) identification of baseline key indicators for marine fish species and habitats; (ii) identification of baseline key water quality indicators; and (iii) submission of scientific monitoring reports on trends (in spite of some shortcomings related to the non-completion of a major report on hydrodynamic and water quality studies for the Gulf of Gabes due to a legal dispute with external contractors). More particularly, an inventory/monitoring of lagoon and marine species with regional and international significance was prepared as well as an inventory/monitoring of alien species and their distribution within the Gulf of Gabes. An important element was the use by INSTM of peer-reviewers for all the studies and assessments in order to improve their scientific quality. The responsibility for a study planned to identify biodiversity impacts caused by the fishing flee was eventually transferred to the DGEQV.

Component 4: (Participatory biodiversity management plans). The rating is *Moderately satisfactory,* because of the number and quality of initiatives undertaken and studies and management plans prepared under the responsibility of APAL (rating could have been higher if disbursement rates had been higher and general administrative capacities had been improved). Key outputs were achieved, namely by: (i) completing six management plans; (ii) creating local development committees in pilot sites; (iii) identifying significant *Posidonia oceanica* (seagrass) areas (mapping); and (iv) assessing progress in achieving management effectiveness for marine-protected areas. Prior to the preparation of biodiversity management plans, an initial concept note had been prepared to address underlying institutional and legal concepts and issues. A feasibility study of a management plan for *Posidonia* area was prepared (in spite of very slow and laborious procurement procedures), although the planned construction of anti-trawling structures was eventually abandoned (as procurement conditions had not been met). An important

and comprehensive baseline inventory and mapping of most of the *Posidonia* seagrass areas and marine plant cover in the Gulf of Gabes was prepared (through a 'forward contract' or "*contrat gré-à-gré*" with INSTM, which also ensured adequate monitoring by using its own resources). Management plans were prepared for the Gulf of Boughrara, the Kneiss Island, the Lagoon (Bahiret) El Bibane and the Kerkennah Islands, as well as a management plan for the Gabes Oasis. Finally, a GIS and Information Exchange Center was established.

Annex 3. Economic and Financial Analysis

General introduction

By combining technical assistance, policy actions and some minor site-specific investments, the project was economically profitable and cost-effective overall. It used least-cost sustainable means with the aim of maximizing its intended environmental benefits.

About the difficulty of an economic analysis

A precise economic analysis of the project is made difficult by the nature of the expected outcomes of its activities. Studies, assessments and management plans have intangible benefits and catalytic influences, which cannot be meaningfully quantified and related to a dollar amount.

About the non-feasibility of a quantitative cost-effectiveness assessment

Moreover, for this kind of biodiversity-related project, a quantitative cost-effectiveness assessment is simply not feasible. The majority of its activities do not generate short- or medium-term measurable outcomes that could be directly linked to the financial inputs. What the project intended to promote was less the achievement of quick measurable results, than long-term sustainability, institutional building, and policy changes.

About the appropriateness of a qualitative cost-effectiveness analysis

On the contrary, a qualitative cost-effectiveness analysis is more appropriate for this project. The analysis is mainly made possible by comparing its activities with least-cost alternatives, which could have generated the same outcomes.

(i) Indirect biodiversity threats

Project activities rightly focused on indirect or broad-based biodiversity threats. This resulted in a cost-effective approach by: (i) identifying specific geographic areas where relatively high levels of biodiversity could have been maintained; (ii) adopting site-specific protection measures; and (iii) focusing on already existing environmental protection infrastructure. Collection of baseline data, biodiversity monitoring, capacity building, and public awareness and participation initiatives were the main activities supported by the project. Therefore, the project was cost-effective, because, for instance, the focus was not on major areas where *Posidonia* sea grass have declined over decades; and major efforts were put into the preparation of management plans for pilot sites, which would eventually be replicated and expanded to other sites in the Gulf with important global or regional marine and coastal biodiversity.

(ii) Appropriate institutional setting

The project opted for a cost-effective institutional scenario by empowering the DGEQV for overall coordination based on its leadership on biodiversity issues and experience gained from other similar operations. Therefore, the project has not created a new institutional entity in charge of biodiversity protection in the Gulf of Gabes (between 2005 and 2012, the proper functioning of this entity would have been very costly. Furthermore, at the end of the project, the Government would have had to find adequate

resources to maintain its sustainability. Nor has the project used contractual staff financed by the project, simply because the option would have been unsustainable.

About economic efficiency
The general economic efficiency of the project is linked to the marine biodiversity losses that might eventually have been avoided thanks to the scientific data collected and analyzed by the project, as well as by participatory approaches supported at the level of local stakeholders. More specific economic efficiency is linked to the focus of project activities on potentially sensitive coastal and marine areas and related issues of biodiversity degradation.

Therefore, the efficiency of the PDO is partially demonstrated by the fact that:

- Costs involved in achieving project objectives (preparedness) were reasonable in comparison with both benefits and recognized norms ("value for money").
- Practices, technologies and techniques, which have been identified and are expected to improve biodiversity conservation, are cost-effective.
- Cost-effective scientific principles introduced by the project have already been and are likely to be still further integrated into key national strategies.

About other indirect and non-quantified economic benefits
Other indirect and non-quantified benefits can be identified by the economic and financial analysis:

- Economic outcomes of sensitization of local user groups (for a more sustainable use of ecosystems)
- Economic externalities linked to improved efficiency and effectiveness of public services (participating departments and agencies) through capacity building activities.
- Positive social externalities, such as: participation of grassroots organizations (eventually leading to the improvement of their fishing and agricultural practices) ; and (ii) capacity building of ministerial departments' officials.
- Positive environmental externalities, such as inventories of species, mapping of sensitive sea grasses, inventories of birds, and the like.

About GEF incremental scenario
The project, designed within the context of the *10th Plan in the Sector for coastal zone and marine protection,* acted as a catalyst for all levels of decision-makers to invest in additional incremental activities for biodiversity protection. The GEF scenario mainly involved collection and analysis of scientific data (studies, assessments, and inventories), and specific training and awareness activities aimed at improving the conservation and sustainable use of biodiversity. Use of GEF incremental resources demonstrated that the management of biodiversity can be based both on scientific knowledge and on local stakeholders' participation, can be sustainable, and can contribute to long-term revenues for the communities concerned.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Supervision/ICR			
Anders A. Alm	Sr Environmental Spec.	MNSRE - HIS	
Sherif Kamel F. Arif	Consultant	GEFVP	
Siaka Bakayoko	Country Manager	AFTMW	
Slaheddine Ben-Halima	Consultant	MNAPC	
Antonio J. Cittati	Consultant	LCSPP	
Lelia Croitoru	Consultant	SASDI	
Concepcion Esperanza Del Castillo	Consultant	MNSWA	
Walid Dhouibi	Procurement Specialist	MNAPC	
Tiguist Fisseha	Disaster Risk Management Speci	LCSDU	
Jaafar Sadok Friaa	Lead Urban Specialist	MNSUR	
Marie A. F. How Yew Kin	Language Program Assistant	MNSSD	
Georges Raphael Khoury-Haddad	Consultant	EASIS	
Dahlia Lotayef	Program Coordinator	AFTN2	
Moez Makhlouf	Consultant	MNAFM	
Carole Megevand	Sr Natural Resources Mgmt. Spe	AFTN1	
Kanta K. Rigaud	Lead Environment Specialist	CPF	
Cheikh A. T. Sagna	Senior Social Development Spec	AFTCS	
Maria Sarraf	Senior Environmental Economist	SASDC	

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY00		25.93
FY01		46.11
FY02		34.55
FY03		57.10
FY04		122.28
FY05		51.28
FY06		0.00
FY07		0.00
FY08		0.00
Total:		337.25

Supervision/ICR		
FY00		0.00
FY01		0.00
FY02		0.00
FY03		0.00
FY04		0.00
FY05		7.03
FY06		92.23
FY07		44.69
FY08		36.04
Total:		179.99

Annex 5. Beneficiary Survey Results

Not applicable

Annex 6. Stakeholder Workshop Report and Results

Within the context of the preparation of the national evaluation of the project as well as the ICR, three major events were successively organized:

a) Stakeholder workshop at the end of the project (December 2012)
The project organized a workshop in December 2012 in Jerba, with the participation of representatives of the five local development committees involved in biodiversity conservation at local and regional levels, together with project national and regional staff, local and regional authorities, as well as representatives of research institutions and of key NGOs operating in the region in the areas of biodiversity and community development (a total of 30 persons).

Major topics discussed by the participants were the following:

- Key strategic axes and results of the study supporting the biodiversity strategy
- Major aspects of impacts of fishing activities on biodiversity and related corrective measures
- Sustainability of activities initiated by the project, in terms of : (i) communication; (ii) planning; (iii) institutional arrangements (to strengthen cooperation between regional entity(ies) and local development committees

b) First ICR mission (February 2013)
Led by the TTL, the first ICR was carried out between 18-23 February 2013 (about 7 weeks after the official closing of the project). The mission included external international and national consultants. Individual meetings were organized with representatives of the four implementing agencies (DGEQV, INSTM, APAL and CITET) and, at the beginning and the end of the mission, two plenary sessions, attended by 15-20 persons, including the Gabes-based members of the POU. During these workshops, all the activities of the project were presented and analyzed. An aide-memoir presented main results of the ICR mission and identified key aspects strengths and weaknesses of the project. The general structure of the forthcoming ICR was also presented.

c) Second ICR mission (April 2013)
Led by the TTL, a second ICR preparation mission was organized from 3 to 5 April 2013. The mission included the same external international and national consultants. Under the chair of the General Secretary of the DGEQV, about ten participants attended a two-day workshop centered on the following elements:

- Presentation of the National ICR and related discussions
- Presentation of key results, lessons learned, challenges and recommendations of the ICR
- Discussion about potential ‘ways forward’ (through individual presentations by the four agencies involved in the implementation of the project).

Annex 7. Summary of Borrower's ICR

Synthesis of the National Implementation Completion Report (NICR)

1. OBJECTIVES

From a methodological point of view, the preparation of the NICR involved the following aspects:

- Analysis of key documentation, namely the Grant Agreement, the Manual of procedures, and the social and environmental safeguard guidelines.
- Analysis of different project activities reports
- Results of meetings and discussion with key persons of participating institutions : Direction Générale de l'Environnement et de la Qualité de la Vie (DGEQV), Centre International des Technologies de l'Environnement de Tunis (CITET), Institut National des Sciences et des Technologies de la Mer (INSTM) and Agence d'Aménagement et de Protection du Littoral (APAL).

2. MAIN CONCLUSIONS

a/ Project outcomes :

The development objective of the Project is to establish a functional integrated monitoring and participatory management system for the project area to manage biodiversity degradation in the Gulf of Gabes region.

While it has not allowed the effective establishment of a permanent institutional mechanisms in charge of managing biodiversity in the Golf of Gabes, the project efficiently addressed key elements aimed at improving an integrated management of biodiversity, namely in the following domains:

- ***A.1. Improving the knowledge basis on biodiversity :*** Analysis of underlying causes of pressure on and degradation of biodiversity and formulation of plans and strategies allowing efficient short- medium- and long-term operations to reduce biodiversity losses in the region (preparation of management plans for pilot sites, formulation of a strategy for biodiversity conservation in the Golf of Gabes). However, in terms of design, detailed planned activities have not allowed the creation of an adequate institutional mechanism in charge of managing biodiversity in an integrated manner.
- ***A.2 : Capacity building for all the stakeholders*** operating in the area of biodiversity conservation at national, regional and local levels.
- ***A.3 : Sensitization of stakeholders*** concerning biodiversity conservation-related challenges and best practices (formulation of sensitization plans, organization of workshops and seminars in the region…)
- ***A.4 : Implementation of a participatory approach*** aimed at creating the condition for local governance and favoring the participation of all local stakeholders in biodiversity conservation.

b/ Project indicators :

Most of the project indicators are rather superficial and descriptive objectives related to project implementation and do not seem to reflect the real impact of the project in terms of improvement of biodiversity in the Golf of Gabes.

The evaluation of these indicators is synthesized in the table below:

	Baseline	Project target	Results	Evaluation
Number of staff in place	0	12	14	Objective fully achieved
Number of fiduciary reports submitted	0	10	14	Objective fully achieved
Number of attendees of training sessions	0	33	40 (15 training modules, 1500 beneficiaries)	Objective fully achieved
Number of local development committees put in place	0	5	5 (in 5 pilot sites)	Objective fully achieved
Scientific knowledge of the ecosystem is improved namely through :	Scientific information is disseminated, not updated	-		
✓ Marine and lagoon species are introduced		Inventory of marine and lagoon species that have been introduced	Study carried out by INSTM	Objective fully achieved
✓ Water quality in the region		Monitoring of the hydrographic quality and sedimentary characteristics in the Golf.	Study non completed	Objective not achieved
✓ Quality of Posidonia seagrass		Mapping of Posidonia sea grass areas	Maps completed by INSTM and APAL	Objective fully achieved
Number of biodiversity management plans	0	6	6 (îslands of Kerkennah, Kneiss, lagoons of Boughrara and Bibène, oasis of Gabes)	Objective fully achieved
Number of implemented management plans (fully or partially)	0	3	1 (in Kneiss)	Objective partially achieved
Cumulative scores based on the "Management Effectiveness Tracking Tool" for the biodiversity management plans,	0	Monitoring efficient management of pilot sites (tracking-tools)	3 evaluation (carried out at the beginning, mid-term and end of the project)	Objective fully achieved
Long term strategy for the sustainability of biodiversity in the Golf of Gabes	0	Study carried out in close collaboration with key stakeholders	1 (study carried out by DGEQV)	Objective fully achieved

c/ Qualitative implementation:

The project was implemented by four national institutions, operating in a quasi-autonomous manner. Each institution was in charge of all the aspects related to procurement, management of contracts and monitoring of its own activities.

At DGEQV, the management unit was in charge of project coordination and preparation of synthesis reports and M&E (financial monitoring, technical reports, organization of supervision missions, organization of steering committee meetings…)

In Gabes, an operation unit was in charge of implementing sensitization activities as well as establishing a dialogue with regional stakeholders.

This technical and administrative independence of the four participating institutions only partially allowed a real integration of the project and an efficient coordination of the different components.

In a parallel manner, the management structure of the project was based on the existing functional structure of each institution – administrative hierarchal set up), with the absence of an operational structure (project entity).

3. ENVIRONMENTAL AND SOCIAL SAFEGUARD MEASURES

a/ Risks management :

The Manual of Procedures identifies two major risks, which could have jeopardized project implementation, these risks being linked, on one hand, to the capacities of the PMU at central level and the Gabes-located POU and, on the other hand, the practical knowledge of procurement procedures.

Proposed measures only partially mitigated these risks. Mainly at the level of INSTM, it was difficult to manage contracts and procurement. Moreover, as both Bank and national procurement procedures were followed, the implementation of different activities was significantly delayed.

b/ Respect of safeguard measures:

The project was mainly a technical assistance operation, with only some field pilot initiatives (artificial reefs south of Kerkennah Islands, construction of the Laguna house in Boughrara and small infrastructures in Kneiss islands.)

Classified as category B, the project needed the implementation of an environmental and social management plan. This plan identified three major mitigation measures: (i) management plans to prevent environmental impacts; (ii) stakeholders' participation to integrate their know-how concerning local threats to biodiversity; and (iii) environmental monitoring of key indicators concerning Halieutic species, habitat, water quality and large areas of *Posidonia* seagrass. These mitigation measures were integrated into project components and activities.

Furthermore, an 'Environmental and Social Management Plan' was elaborated within the context of activities of Component 1. The plan was a crucial tool for decision-making during the implementation of the different management plans in pilot sites and project recommendations.

4. FACTORS IMPROVING PROJECT SUSTAINABILITY

The project supported the elaboration of important plans and strategies for an integrated management of the biodiversity of the Golf of Gabes ecosystem and if selected pilot sites with significant natural potential.

These plans should be implemented on a short, medium and long term.

Consistent effort should aim at:

- Disseminating project documents and reports among all the national, regional and local stakeholders. The DGEQV already created a Web site to present to a large public audience all the activities and results (all documents can be downloaded).

- Putting in place an institutional structure in charge of further monitoring the ecosystems of the Golf of Gabes, updating data, coordinating stakeholders for the implementation of the management plan and biodiversity conservation strategy, and therefore ensuring sustainable management of natural resources in the region.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

Not applicable

Annex 9. List of Supporting Documents

OPCS (2006) *Implementation completion and results report, Guidelines*

Project Appraisal Document, Gulf of Gabes marine and coastal resources protection project, February 9, 2005

Reports of Supervision Missions carried out by the World Bank: December 2010, June 2011, and June 2012

Various 'Implementation Status & Results (ISRs) prepared by the World Bank team

Mid-Term Evaluation Report (8-20 January 2009)

Ministère de l'Environnement et des Ressources Hydrauliques 'Protection des Ressources Marines et Côtières du Golf de Gabes (Mai 2004), *Plan d'Aménagement Environnemental*

Ministère de l'Environnement et des Ressources Hydrauliques 'Projet « Protection des Ressources Marines et Côtières du Golf de Gabes » (Mai 2004) *Cadre de procédures pour la participation des communautés dans la gestion et la conservation des Ressources marines et côtières du Golf de Gabes*

PNUE (2005) 'Gestion des zones côtières en Tunisie'

MAP of Tunisia (*Source*: IBRD, 33500)