

**UNITED NATIONS DEVELOPMENT PROGRAMME
GLOBAL ENVIRONMENT FACILITY**

**Project of the Government
Of the Kingdom of Morocco**

PROJECT DOCUMENT

Number: MOR/97/G33/A/1G/99

Title: Conservation of Wetland and Coastal Ecosystems in the Mediterranean Region

Duration: 5 years

Project Sites: Provinces of Nador and Berkane

ACC/UNDP Sector and Sub-sector: 0400 Environment
0340 Biological resources

GEF Theme: Biodiversity

Government Implementing Agency: Ministry of Urbanism, Environment, Land Development and Housing;
Secretariat of State in charge of the environment; Directorate of Observation, Studies and Coordination

Executing Agency: Government of the Kingdom of Morocco

Estimated Starting Date: February 1999

UNDP/GEF:	\$2,873,700
National Contribution (in kind):	\$7,067,910
	(Dh 23,677,500)
FFEM:	\$ 664,125
	(FF 3,984,750)
Total	\$10,605,735

Brief Description:

This project is the Moroccan component of a Mediterranean regional initiative involving Albania, Egypt, Lebanon, Morocco, the Palestinian Authority and Tunisia. The overall initiative is aimed at ensuring the sustainable management the biological diversity of the coastal areas and wetlands in 6 Mediterranean countries/ Authority, through the development of adequate legal and regulatory frameworks, the creation of institutional organizations adapted to the complexity of the issues at stake, capacity-building and the development of an exchange network at the regional level both to achieve economies of scale and to save time when implementing and replicating the innovating actions undertaken.

The objective of the project is to create or enhance the exchange structures and fora concerned with this general management:

- ◆ By establishing interministerial coordination mechanisms for projects undertaken at the local and national levels;
- ◆ By developing demonstration activities at the most significant sites;
- ◆ By awareness-raising, training and networking of the population groups and the social and economic actors and establishing linkages between them around the Mediterranean basin.

On behalf of	Signature	Date	Name/Title
Government:	_____	_____	_____
UNDP:	_____	_____	_____

Ministry of the Environment
at the Region of Murcia

TEBO

Conservation of Wetlands

Environmental Impact Assessment

Provinces
Murcia

Region

Environmental Impact Assessment
of the Murcia Region

Ministry of the Environment

Conservation of Wetlands

Provinces
Murcia

Environmental Impact Assessment

The Murcia Region is a coastal region with a high density of wetlands and a high level of biodiversity. The Murcia Region is a coastal region with a high density of wetlands and a high level of biodiversity. The Murcia Region is a coastal region with a high density of wetlands and a high level of biodiversity.

Environmental Impact Assessment

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Environmental Impact Assessment
of the Murcia Region

Environmental Impact Assessment

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Environmental Impact Assessment

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ACRONYMS

ADB:	African Development Bank
CBD:	Biodiversity and Desertification Unit (Cellule Biodiversité et Désertification)
CITES:	Convention on International Trade in Endangered Species of Wild Flora and Fauna
CNE:	National Environment Council (Conseil National de l'Environnement)
COL:	Local Operational Units (Local Operational Units)
CPE:	Provincial Environment Councils (Conseils Provinciaux de l'Environnement)
CRE:	Regional Environment Councils (Conseils Régionaux de l'Environnement)
DGCL:	General Directorate of Local Communities (French Ministry of the Interior)
DH:	Dirham
DOEC/ME:	Directorate of Observation, Studies and Coordination / Ministry of Environment (Morocco)
DREFO:	Regional Directorate of Water and Forestry of the Oriental
EIB:	European Investment Bank
ENB:	National Study on Biodiversity (Étude Nationale sur la Biodiversité)
EU:	European Union
FFEM:	French Global Environment Fund (Fonds Français pour l'Environnement Mondial)
GDP:	Gross Domestic Product
GEF:	Global Environment Facility
IMT:	International Maritime Territory
IUCN:	International Union for Conservation of Nature and Natural Resources
MAB:	Man and the Biosphere Programme
MAP:	Mediterranean Action Plan
MEDPOL:	Mediterranean Pollution Monitoring and Research Programme (of MAP)
METAP:	Mediterranean Technical Assistance Programme
NC:	National Coordinator
NEAP:	National Environmental Action Plan
NGO:	Non-Governmental Organization
ONEM:	National Environment Observatory of Morocco (Observatoire national de l'Environnement du Maroc)
PARC:	Action and Capacity-Building Process (Processus d'Action et de Renforcement des Capacités)
PGE:	Environmental Management Project (Projet de Gestion de l'Environnement)
RAC/SPA:	Regional Activity Centre for Specially Protected Areas (MAP)
SIBE:	Sites of Biological and Ecological Interest (Sites d'Intérêt Biologique et Ecologique)
UNDP:	United Nations Development Programme
UNEP:	United Nations Environment Programme
UTOM:	Household Waste Treatment Unit (Unité de Traitement des Ordures Ménagères)
WWF:	World Wide Fund for Nature

A. CONTEXT

1. REGIONALITY OF PROJECT

The main objective of this project is to build capacity in the participating countries in the Mediterranean region to conserve threatened, globally significant biodiversity in coastal and wetland eco-systems within the framework of sustainable coastal development. The project therefore aims at «closing the Mediterranean circle», in terms of wetland and coastal conservation initiative. The project will ensure that lessons learned and experiences made in the northern rim of the Mediterranean can be effectively transferred and, where applicable, applied and/or adapted to the prevailing circumstances in the participating countries. The regionality of the project provides a greater cost effectiveness and effectiveness for such information and experience transfers both on a north-south basis as well as on a south-south basis.

For the purposes of this project, eligible wetlands, primarily of lagoon type, are those whose flows are interconnected with the Mediterranean Sea, while coastal areas are the terrestrial components of the coastal zone in the vicinity, and under the influence of the Mediterranean Sea. The project does therefore not address navigational and marine pollution issues and nor marine biodiversity. These are presently covered by other existing and planned programmes, in particular under MAP/UNEP (GEF PDF B: Formulation of a strategic action programme for the Mediterranean Sea to address pollution from land-based activities).

This proposal addresses conservation of globally threatened biodiversity in 16 important wetland and coastal sites in five Mediterranean countries and in the Palestinian Authority. Through a combination of innovative land-use and wetland policies at national level, site protection and management at local level and regional networking and exchange of experience the proposal will provide a biodiversity protection increment to other brown programme addressing pollution and water resource issues in the beneficiary countries/authority. At site level mechanisms for taking account of local concerns and ensuring local participation and economic returns are built into the project from the outset.

The Mediterranean region has seen the rise and fall of many empires over the last 2500 years. Numerous invasions and commercial links, many of them by sea, have seen eastern traders found cities in the western basin, Catalan influence extend as far as Greece, and Arabic culture penetrate well into the Iberian peninsula. These fluxes, together with the enclosed nature of the sea, have led to the establishment of a common Mediterranean identity and culture. This identity is reinforced by the circum-Mediterranean climate of hot dry summers and rainy winters, which is also responsible for the development of ecosystems characteristic of the region.

The Mediterranean coastline (26,000 km) is an area of high biodiversity, where more than 50% of the 25,000 plant species are endemic to the region. It is also a critical area for migratory birds in the Africa-Palearctic flyway as wetlands in the region provide an essential flyway stepping stone on either side of the Mediterranean Sea and between the sea and the vast expanse of the Sahara desert to the south.

The major threats to the exceptional biodiversity of these wetland and coastal ecosystems related to uncontrolled development, urbanization, increasing national and international tourism, land-based pollution, and unplanned or over-exploitation of natural resources, in particular freshwater.

Aware of their common heritage, the Mediterranean States and European Union have developed common programmes and policies for the sustainable development and conservation of the coast since 1975. The Mediterranean Action Plan (UNEP Regional Seas Programme), the Mediterranean Commission on Sustainable Development, METAP, LIFE, MedWet, Natura 2000 and MEDA (EU) are some of these regional initiatives.

The MedWet programme for the conservation of Mediterranean wetlands originated from the Grado Conference (Italy, 1991). The initiative was recently widened (Venice, 1996) where all the riparian States present endorsed a common strategy for the conservation of Mediterranean wetlands. In parallel, the Mediterranean Action Plan, Conservatoire du Littoral (France) and Ramsar Convention secretariat held a joint technical meeting on coastal zone

management (Hyeret, 1995) where 12 countries agreed on the need to develop land use policies for effective management of the coastal zone.

Today, the States of the Mediterranean region are at different stages of economic and institutional development and therefore differ in their capacity to address biodiversity issues within the context of sustainable development. Incremental funding is required to allow them to implement agreed regional policies in the field.

The overall GEF-funded Wetlands and Coastal project includes six countries/authorities, namely Albania, Egypt, Tunisia, Morocco, Lebanon, and the Palestinian Authority.

2. HOST COUNTRY STRATEGY

2.1 Recent Developments

A number of changes in the Moroccan institutional structure have occurred in recent years. In February 1995, the Under-Secretariat of State in charge of environmental issues within the Ministry of the Interior, created in 1992, was reorganized as the Ministry of Environment. This Ministry is responsible in particular for the coordination of national and international activities undertaken within the framework of the preparation of policies and strategies regarding the environment and development.

In 1997, an institutional reorganization brought together the ministerial departments in charge of agriculture, equipment and environment to create one single entity within which environmental matters have been entrusted to a secretariat of State. In addition, the decentralization process currently underway has provided for the creation of Regional Councils that will be elected during the fourth quarter of 1997. According to the provisions of the 1997 Dahir on the power of the governors, the governor of the Regional seat is empowered to implement the decisions of the Regional Council; therefore, the Wali of Oujda will act in that capacity for the Oriental Region.

The other institutions concerned with the environment are the National Environment Council (CNE), an advisory entity with concertation functions chaired by the Minister of Environment. At the regional level, newly created entities are the Regional Environment Councils (CRE) for the 7 economic regions and the Provincial Environmental Councils (CPE) which constitute concertation fora with representation from the administrative departments concerned, the local communities, the associations and the users. The National Environment Observatory of Morocco (ONEM) was established in 1994, as a reliable tool for information and decision support for planning. That same year, a Biodiversity and Desertification Unit (CBD) was created within ONEM. Its mission is to ensure the coordination between the ministerial departments and institutions concerned with biodiversity, desertification and climate change and to elaborate policies, strategies and action plans regarding the conservation and protection of the natural environment and biodiversity. In this regard, as a point focal, it ensures the follow-up on the implementation of the Convention on Biological Diversity and related conventions, such as the CITES and Ramsar Conventions as well as the United Nations Convention to Combat Desertification and the Framework Convention on Climate change.

Also, a National Laboratory for the Study and Monitoring of Pollution and Nuisances was established as a technical and scientific reference instrument, in order to ensure the continuous monitoring and control of the various forms of pollution and environmental nuisances.

2.2 Policy documents

There are several general policy documents regarding the environment and development that provide for specific actions in the long or not so long term. The most important one is the National Strategy for the Protection of the Environment and Sustainable Development Durable (funded by UNDP), completed in 1995, defining priority areas and indicators to be used in its implementation. This Strategy is a response to the requirements of the Convention on Biological Diversity. The National Study on Biodiversity (ENB) and the Study on Protected Areas which identifies the Sites with Biological and Ecological Interest (SIBE) must serve as a basis for the elaboration of a National Strategy and Action Plan for the conservation and sustainable use of Morocco's biodiversity.

- The National Environmental Action Plan (NEAP) was initiated within the Process for Action and Capacity-Building (PARC) undertaken with the support of the Capacity 21 Programme (UNDP), with the participation of UNFPA. This project is aimed at elaborating an action plan for the implementation of the national environmental protection strategy, thus responding to Action 21.

3. PRIOR OR ONGOING ASSISTANCE

Most donors making contributions in Morocco in the area of environment do so to support and complement actions undertaken by the Moroccan authorities, who have made this sector a priority. This contributes to the elaboration of legal and institutional instruments and training of the actors, in particular in the areas of impact studies, water cycle management, knowledge, prevention and control of pollution, establishing standards, monitoring and evaluation. These various reinforcement activities are characteristic results of coherent national action; they will be complemented at the practical level by the activities envisioned under the GEF project concerning the coastal area and its specific features.

Total aid received in 1993 was US\$ 318 million and US\$ 272 million in 1994. For the natural resource sector, inputs amounted to US\$ 12 million in 1993 and US\$ 9 million in 1994, with US\$ 7 million programmed for 1995. Major donors include UNDP, the World Bank (the METAP Programme in particular), the European Union, the ADB, France, Spain, and Germany.

Among the main programmes being implemented or in preparation, the following include components that are such as to complement the activities to be undertaken within the framework of the GEF project and to achieve a synergistic effect:

- a) *The National Strategy for Environmental Protection and Sustainable Development* (with UNDP funding) was completed in 1995. It defines priority areas and the indicators to be used in its implementation.
- b) *The National Sustainable Development Network*. UNDP is also financing over the 1994-1997 period the establishment of a National Sustainable Development Network aimed at strengthening existing capacities and facilitating the flow of information between the various institutions concerned with sustainable development. It now has an operational Internet server (www.minenv.gov.ma).
- c) *The NEAP* (National Environment Action Plan) is being elaborated with the support of the Capacity 21 Unit of UNDP (see page 2). It is currently in its finalization phase.
- d) *The Project for the Conservation of Natural Resources, Fauna, Flora and National Parks*, also called "Study on Protected Areas" (with ADB funding), undertaken by the Ministry of Agriculture and Agricultural Development, was the object of a study by BCEOM/SECA over the 1992-1995 period; it drew an inventory of the areas to be protected and prepared plans for the establishment of parks and biological preserves. A number of complementary activities are funded by other donors: the German Cooperation Agency (GTZ) is contributing to the implementation of three national parks, one of which is located on the Atlantic coast near Tangier, and METAP is supporting the training of the actors involved and the creation of the Al Hoceima Park.

The GEF/World Bank is preparing (project brief/PDF-Bloc B) a project for the implementation of this study on protected areas through the funding of management and conservation measures in 5 National Parks and 9 SIBEs, with complementary linkages with those conducted in the north-east under the project for the conservation of wetlands and coastal ecosystems in the Mediterranean region.

- e) *The Environmental Management Support Programme* is aimed at providing the department in charge of the environment with the institutional, regulatory and organizational means required for the development of coordinated action policies.

This programme is funded by various donors, including:

- ◆ UNDP and UNESCO for the creation and implementation of the National Observatory for the Environment of Morocco (ONEM) which was established in 1995;
 - ◆ Germany for an environmental protection project aimed at capacity-building through support to the National Environmental Laboratory and implementing an awareness-raising programme;
 - ◆ The World Bank is funding an *Environmental Management Project* over the 1994-1998 period, aimed at helping the Government strengthen its institutional framework for environmental management and conservation. The main objectives of the EMP are to reinforce the legal and institutional frameworks and to increase assistance to the public and private sectors for the development of clean technologies aimed at preventing and controlling the various forms of pollution and environmental nuisances.
- f) The various actions conducted in the area of *Water Resources and Sanitation*, watershed policy, watershed management, clean up of various rivers and cities (France, Germany, METAP, EU, ADB, UNDP, EIB).
- g) Land-use planning, support to the Agency for the Development of the Northern Region (Oriental), integrated management at Martil (METAP, EU). The Agency for the Development of the Provinces and Prefectures of Northern Morocco, with the various Departments and other actors, is initiating investment projects for the development of the northern regions, particularly in areas in connection with environmental protection.
- h) Instruments for monitoring and evaluation (METAP, EU).
- i) *The Programme of Action for Development and Planning of the Moroccan Mediterranean Region (PAIDAR)*, is aimed at strengthening the socioeconomic capacities of the Northern Region, in particular, by establishing appropriate installations and adequate infrastructure.
- j) *The MEDGEOBASE/Morocco project* (METAP/European Union) has as its main objective the establishment of a **Geographic Information System (GIS) database on land-use** in the Moroccan littoral region, extending 60 km inland, over a total surface area of 90,000 km² (from the Algerian border to Tiznit). The project has reached completion for the coastal area described above and will be continued for the rest of the country.
- k) The project entitled "*System of Information and Data on the Environment (SIDE)*" is a computerized system that will be put into place within ONEM, to help elaborate and monitor environmental indicators and produce yearly/sectoral reports on the Environment. It will be put into place in January/February 1998.
- l) *The Technical Workshop on Natural Areas* (Atelier Technique sur les Espaces Naturels - ATEN) funded by the French Ministry of Environment, will provide training programmes to the Moroccan Ministry in charge of the Environment with a view to strengthening capacities on issues regarding the littoral region and protected areas.

In the area of Environment, in 1994, Morocco and France have instituted a joint Technical Committee as a concertation framework for the formulation of projects of common interest. The Governments of the Kingdom of Morocco and the French Republic have signed in Rabat on 19 April 1996, a cooperation agreement in the area of environment, for the implementation of integrated actions with a concrete impact on environmental preservation and management.

4. INSTITUTIONAL FRAMEWORK FOR SUBSECTOR

4.1 Competent institutions

The ministerial departments with competency in environmental matters include:

- The ministerial department in charge of the Environment,
- The ministerial department in charge of the Interior,
- The ministerial department in charge of Agriculture and Agricultural Development (Water and Forestry)
- The ministerial department in charge of Public Works,
- The ministerial department in charge of Maritime Fisheries and the Merchant Navy,
- The ministerial department in charge of Higher Education, Scientific Research and Executive Training,
- The ministerial department in charge of Cultural Affairs,
- The ministerial department in charge of Tourism,
- The ministerial department in charge of Commerce and Industry,
- The ministerial department in charge of Foreign Affairs and Cooperation.

The mandates and roles of the various ministerial departments concerned with environmental issues are the following:

Ministry of Agriculture, Equipment and Environment:

Department of Environment

The Department of Environment of the Ministry of Agriculture, Equipment and Environment is responsible for the elaboration of national policy concerning environmental management and sustainable development, as well as for the coordination between the departments and actors concerned with the environment in Morocco. It is in charge of the implementation of the strategies and action plans aimed at protecting the environment, and of institutional and legal capacity building in this area

This department has three directorates:

- The Directorate of Observation, Studies and Coordination, whose mission is to monitor the state of the environment, conduct studies and implement projects on the various environmental issues, and ensure coordination between the actors concerned. This Directorate has two technical institutions: the National Observatory for the Environment of Morocco (ONEM), an information and decision-aid tool, and the National Laboratory for Pollution and Nuisance Studies and Monitoring with different units in charge of water, soil and atmospheric pollution of chemical or biological origin.
- The Directorate of Regulations and Controls, which is concerned with environmental legislation.
- The Directorate of Communication and Training, in charge of the awareness-raising, information and training programmes in the field of environmental protection.

Department in charge of Agriculture

The Department in charge of Agriculture at the Ministry of Agriculture, Equipment and Environment consists of several Administrations and Directorates among which the Administration of Water Resources, Forestry and Soil Conservation, which is responsible for the National Parks, the Preserves and the management of the major international conventions pertaining to natural resources (CITES, RAMSAR, BONN, protocol on specially protected areas, etc.). Additional staff is being assigned to the protection of areas and species.

Department in charge of Public Works

The Department of Public Works at the Ministry of Agriculture, Equipment and Environment comprises numerous directorates and entities with important roles in areas concerning the environment, including: the Directorate of Water Research and Planning (DRPE), the Directorate of National Meteorology, the Directorate of Technical Affairs, the Directorate of Ports and the Maritime Domain, the Directorate of Roads and Road Circulation, the Public Laboratory for Tests and Studies (LPEE), the National Office for Drinking Water (ONEP, a public institution), which is responsible inter alia for the production of drinking water, the management of studies on sanitation in those sectors where it ensures water supply.

Ministry of the Interior

The Ministry of the Interior is also responsible for various actions in connection with the environment and in particular through the General Directorate of Urbanism, Architecture and Land-Use Planning (DGUAT), the

General Directorate of Local Communities with the Directorate of Water and Sanitation, the Directorate of Regulations and Concessions and the Inspection Department of Civil Protection. The Ministry of the Interior is responsible for the preparation of the decree ordering a public enquiry for the creation of each national park, to be signed by the Prime Minister. This ministry also includes the Directorate of Domains and Land Affairs which is concerned with land matters.

Department in charge of Fisheries

This department is in charge of the management of natural resources in marine and lagoon environments. It collects technical and scientific data through the intermediary of the Scientific Institute of Maritime Fisheries (ISPM). In addition, it is responsible for the National Emergency Plan in the event of pollution and the National Network for the Monitoring of Marine Environment Quality (RNOM).

4.2 Legal Framework

The national legislation pertaining to the environment is being revised and improved with a view to harmonizing it with the new instruments signed by the country and in particular the Convention on Biological Diversity. Within this context, the legislators are preparing a framework law on the environment.

A number of legal texts on the environment and the conservation of the natural and cultural heritage are in effect, including in particular:

- Dahir of 1917 on forest use and conservation;
- Dahir of 11 September 1934 on national parks;
- Vizierial Decree of 26 April 1934, amended in 1949, setting the procedure to be applied for the creation of national parks;
- Dahir of 25 December 1980 on the conservation of historical monuments and sites, providing for the classification of exceptional natural sites which may be considered national monuments and enjoy legal protection;
- Decree of 20 March 1946 instituting the Advisory Committee for National Parks;
- Dahir of 23 November 1973 on marine fisheries.

The task of modernizing Morocco's legal apparatus was granted priority in view of the gaps existing in this area. Indeed, the legal texts pertaining to environmental issues, over 350 instruments, are outdated and ill adapted to the current national socioeconomic realities and data. A strategy for the reinforcement of the legal framework has been elaborated in order to update the legal apparatus regarding environment along scientific and realistic lines, taking into consideration both the national and international context. This strategy is based on the following actions:

- Consolidation and modernization of existing texts;
- Elaboration of new texts to fill the existing gaps in the field of environment;
- Insertion of the provisions of international conventions within the Moroccan legislation;
- Establishment of mechanisms and associated measures aimed at improving the enforcement of the laws and regulations.

For this purpose, the Department of Environment initiated and developed new draft legislation in close collaboration with other departments concerned, in particular within special committees, including the following:

* **Draft Law on the Protection and Use of the Environment:** This is a framework law on environmental protection (currently being adopted).

* **Draft Law on coastal areas:** The Department of Environment proposes to go beyond the scope of Circular no. 2007 of 16 June 1964 instituting the Interministerial Commission In Charge of Tourism Development in the Littoral Region (CICATEL), and to formulate a law dealing with the coastal area in its entirety and as an ecosystem. This GEF/UNDP project will contribute to the elaboration of this instrument.

* **Order pertaining to the preparation and fight against accidental marine pollution called National Emergency Plan (PUN):** Morocco adopted this plan in the area of marine pollution resulting from accidents at sea or in the littoral region. This Plan is a collection of necessary information, guidelines and instructions allowing the public authorities to prevent or to fight under the best possible conditions any massive marine pollution by petroleum products or other harmful products threatening the marine environment and the coastal areas. (Adopted.)

* **Draft laws and decrees on the fight against air pollution.** (Currently being adopted.)

* **Draft Decree on the fight against air pollution in the cement manufacturing sector.** (Currently being elaborated.)

* **Draft laws and decrees on environmental impact studies.** (Currently being elaborated.)

* **Draft law on waste management and disposal.** (Currently being elaborated.)

* **Drafts of legal instruments pertaining to the implementation of Law 10-95 on water** being elaborated jointly by the Department of Environment and the Department Equipment, including:

- a. The draft decree on quality standards for water and the inventory of the degree of water pollution;
- b. The draft decree on spills, leaching, release, direct or indirect discharge in underground or surface water;
- c. The draft executive order of the Prime Minister for the application of the Decree pertaining to the preparation and fight against accidental marine pollution.

4.3 Legislation on Protected Areas

The National Parks were established by reference to the Royal Decree of 11 September 1934. The ministerial Decree of 26 September 1934 set forth the applicable procedure. Each National Park is created by a ministerial ordinance or decree and the regulations applicable to each park are established individually. A site management committee is instituted. Any activity in the park area requires prior agreement of the Water and Forestry Administration.

4.4 International Conventions, Agreements and Protocols

Morocco is a party to the following conventions, protocols and agreements:

- African Convention on the Conservation of Nature and Natural Resources (1968 - Algiers) adhesion in 1977;
- Convention on Wetlands of international importance (Ramsar - 1971), ratified on 20 June 1980. Four sites were designated, three on the Atlantic coast and one inland;
- Convention for the Protection of the World Cultural and Natural Heritage (World Heritage Convention, Paris - 1972), ratified on 28 October 1975;
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973), ratified in 1975;
- Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona - 1976), ratified in 1980;
- Protocol concerning Mediterranean Specially Protected Areas (to the Barcelona Convention, Geneva, 1982), ratified in 1982;
- Convention on Migratory Species (Bonn, 1979) signed in 1983;
- Convention to Combat Desertification and Drought in 1994;
- Convention on Climate Change (New York - 1992), signed in June 1992 and ratified in December 1995;
- Convention on Biological Diversity (Rio - 1992), signed in June 1992 and ratified on 21 August 1995.

B. PROJECT JUSTIFICATION

1. PROBLEMS TO BE ADDRESSED AND PRESENT SITUATION

1.0 Present situation and regional approach

Although linked to sites located in diverse countries, the problems to be addressed in the Mediterranean regions are generally homogeneous both as regards the aggressions and the institutional and legal difficulties. The approach selected for this project is such as to enable the various actors to combat identical or similar threats in six countries / territories, with a permanent capacity for exchange at the regional level, thereby allowing gains in efficiency and time in the process.

The table below summarizes the current threats on biodiversity and the responses to be implemented under the project to eliminate them or to mitigate their impacts.

THREATS ON BIODIVERSITY	PROJECT RESPONSES	OBJECTIVES
LEGAL		
Gaps in laws and regulations in the areas of planning, land-use planning and protection of natural sites.	<ul style="list-style-type: none"> - Reinforcement and/or development of legislation and regulations on natural areas. - Establishment and/or enhancement of land-use planning tools. - Mechanism for the control of land use and activities. - Incentives for the establishment of land-property and land-use registry systems. - Mechanisms for acquisition, easements, and compensation. - Mechanisms for public involvement. 	Establishment of a legal framework for the sustainable protection of areas and species.
Lack of legal protection for the sites	<ul style="list-style-type: none"> - Granting legal protection (under law or regulation). - State intervention in land matters. 	Durable site protection.
PARTICIPATION, CONCERTATION AWARENESS-RAISING		
Lack of awareness or insufficient consideration given to development issues by the social actors.	<ul style="list-style-type: none"> - Development of concertation units at the local and national levels. - Information regarding planning options. - Involvement of the population groups in discussions. - Conducting impact studies and public hearings. - Creation of monitoring indicators, upstream and downstream, for the general public. 	Integration of environmental protection as a factor of social and economic development. Integration of the sustainability concept in the collective decision-making process. Participation of the population in policy choices.
SITE MANAGEMENT		
Urban development within sensitive natural areas.	Alternative urban planning	Form of urban development compatible with site preservation.

Illegal construction on the sites, incursions, urban sprawl, sub-standard housing construction	<ul style="list-style-type: none"> - Creation of construction-free zones. - Monitoring of illegal constructions and abusive use. 	Preservation of natural integrity of the sites.
Solid pollution	<ul style="list-style-type: none"> - Waste planning and management (looking for alternative solutions for storage and processing) 	Elimination of wild dumps on the sites.
Liquid pollution	<ul style="list-style-type: none"> - Water treatment (sanitation networks, treatment plants – national contribution) 	Improved water quality on the sites.
Agricultural pollution	<ul style="list-style-type: none"> - Plans for water and resource management. - Training farmers in resource management. - Monitoring 	Preservation of water quality on the sites.
Excessive withdrawal from aquifers. Abusive drainage	<ul style="list-style-type: none"> - Training farmers in resource management. - Sustainable management of irrigation 	Water conservation.
Overgrazing	<ul style="list-style-type: none"> - Training farmers in resource management. 	Controlled grazing, compatible with biodiversity conservation.
Water flow problems	<ul style="list-style-type: none"> - Water system management. - Dredging channels. - Sustainable management of irrigation 	Regeneration of natural water flow.
Excessive erosion of coastal dunes	<ul style="list-style-type: none"> - Natural dune fixation. 	Erosion control and preservation of space integrity.
Sand extraction	<ul style="list-style-type: none"> - Reinforcing regulations. - Search for alternative solutions. - Monitoring/Control. 	Preservation of sites' natural integrity.
Hunting and/or removal of biodiversity (capture of birds, etc.)	<ul style="list-style-type: none"> - Hunting regulations (from total interdiction to control of hunting periods, and quantity and quality of 	Preservation of endangered species.
Absence of management or increased pressures from tourism	<ul style="list-style-type: none"> - Planning and management of tourism flows. 	- Modelling of tourism development at a level compatible with the preservation of necessary natural habitats.

REGIONAL COORDINATION		
Spot management of regional problems sometimes with potentially incompatible measures.	<ul style="list-style-type: none"> - Networking of project actors. - Prioritization of conservation actions of biodiversity assets under the authority of the most suitable/competent national partner. 	Overall coherence of management for improved efficiency of use of regional biodiversity
Waste of energy, time and money as a result of the recreation of the biodiversity protection process due to a lack of adequate transfer of policy measures and actions conducted by other international actors (reinventing the wheel).	<ul style="list-style-type: none"> - Regional and international exchanges of information and training. - Diffusion of documentary and technical data. - Transfer of know-how. 	Facilitation and acceleration of the regional biodiversity conservation process. Economies of scale. Similarity of the instruments. Adoption of common indicators and evaluation tools.
Failure to recognize the actors involved in the protection of biodiversity in other countries.	<ul style="list-style-type: none"> - Networking and facilitation of linkages among the actors (colloquia, seminars, Internet, Web sites, etc.). 	Creation of relational systems between actors in the area of integrated management, similar to those in other areas (medicine, sciences, etc.), with increased horizontal integration of the more specialized participants (fauna, flora, ornithology, marine, terrestrial, land development and planning, development, etc.).

1.1 Institutional domains and implementation of integrated policies

The principles of the integrated management of coastal areas or wetlands are yet to become generally operationalized in Morocco, as in the other countries of the Mediterranean Basin. This is due to the fact that it requires the coordinated involvement of numerous actors, the intervention of various levels of public action, and the integration of the socioeconomic context. The management of the coastal area, one particularly prone to conflicts of various sorts, does not readily adapt to sectoral imperatives and requires a type of general planning and land-use planning which rises above the traditional fragmented, isolated administrative actions.

In addition, the incipient drive towards decentralization requires an integration of the issues regarding the coastal areas at all decision-making and concertation levels.

Finally, the Department in charge of the Environment, which was recently created in Morocco as in many other countries, does not yet have a decentralized structure covering the entire national territory so that it has to act in coordination with other Departments while making provisions for the training and capacity-building of a number of actors.

1.2 Sites selected for the project

Within the framework of the study of the Ministry of Agriculture and Agricultural Development, an exhaustive survey of the Sites of Biological and Ecological Interest (SIBE) was conducted. The sites selected by the project were all included in the study.

Significance of the SIBEs in terms of biodiversity:

The list of Moroccan biodiversity drawn up by MedWet - Tour du Valat (last update on 23/09/96) includes 365 "candidate" taxa, potentially threatened at the global level. Among these 365 potentially threatened taxa, 67 (or 18.4%) are taxa that are threatened at the global level and present on the Mediterranean coast of Morocco.

Some 41,8% of the threatened species present on the Mediterranean coast of Morocco are present at all 5 sites, i.e. 28 species. Among those, 7 endangered species (IUCN category "EN") are present in the site network: 6 plants endemic to Morocco and the gravely endangered monk seal, *Monachus monachus*, observed regularly on the sites with marine frontage. Two of the sites also provide shelter to the slender-billed curlew *Numenius tenuirostris*, the most threatened limicole in Europe and definitely among the ten most threatened limicoles in the world; this species has been classified "Critical" by Birdlife. The coastal area formed by these two sites could have the capacity to receive other hibernating individuals. The same coastal area also supports 2 species of reptiles, *Chalcides parallelus* and *Chalcides mauritanicus*, which are threatened and localized, known only in this coastal zone of Morocco and on a small portion of the neighbouring Algerian coast. Finally, 3 other bird species and 2 other reptile species under worldwide threat are present on at least 3 of the 4 sites.

1.2.1 Estuary of the Moulouya River

This site straddles the two administrative provinces of Nador and Berkane.

Land tenure: Mostly public lands with peripheral private lands.

Physical features: The river created relatively narrow gorges and after meandering within a rich riparian forest, reaches a wide alluvial plain; its estuary is obstructed in part with numerous sand bars of variable configuration. The marsh zone covers some 400 hectares and is complemented by the Chararba marshlands. The backshore is sandy and rectilinear with numerous sand dunes. This area is largely untouched by urban development.

This site consists mostly of public lands. Dealing with the real causes of the degradation of biodiversity will require in addition that broader protection be provided on private lands adjacent to the Moulouya flood plain, on either side of its course on a strip approximately 500 metres in width. Likewise, it will be necessary to include in the site the dunal massifs located in the public forest lands between the estuary and Saïdia in the east, up to Cap de l'Eau in the west.

Significance in terms of biodiversity:

Among the 67 globally threatened taxa present on the Mediterranean coast of Morocco, 18 (13 certainly and 5 possibly) are present on the proposed site of the Moulouya estuary, i.e. 26.8% of the Mediterranean coast threatened taxa and 4.9% of all threatened taxa.

PLANTS	MAMMALS	BIRDS	REPT. & AMPHIB.
<i>Malcolmia arenaria</i> ? (R)	<i>Lutra lutra</i>	<i>Marmaronetta angustirostris</i> (V)	<i>Testudo graeca</i> ? (V)
<i>Spergularia embergeri</i> (E)	<i>Monachus monachus</i> (E)	<i>Aythya nyroca</i> (V)	<i>Chamaeleo chamaeleon</i>
		<i>Numenius tenuirostris</i> ? (Cr)	<i>Chalcides parallelus</i>
		<i>Larus audouini</i> (R)	<i>Chalcides mauritanicus</i>
		<i>Falco naumanni</i> (R)	
		<i>Milvus milvus</i> (K)	
		<i>Tetrax tetrax</i> ? (R)	
		<i>Phalacrocorax aristotelis desmarestii</i>	
		<i>Turnix sylvatica sylvatica</i> ?	
		<i>Porphyrio p. porphyrio</i>	

The letters included in parentheses after the names of the taxa indicate their IUCN status.

? = Possible or probable presence at the site.

In all, 10 species of birds, 4 species of reptiles, 2 species of mammals and 2 species of plants under threat are

probably or certainly present at the estuary of the Moulouya River. Particularly noteworthy among the plants is one species endemic to Morocco, *Spergularia embergeri*, currently endangered. The monk seal *Monachus monachus*, also endangered, frequents this site. The slender-billed curlew *Numenius tenuirostris* and the Andalusian hemipode *Turnix sylvatica sylvatica* were still observed recently and it may very well be that the estuary of the Moulouya river remains potentially favourable to these two birds among the rarest in Europe and probably in the world. The offshore bar at this site also provides a habitat for two highly localized reptiles, *Chalcides parallelus* and *Chalcides mauritanicus*, present only in this area of the Maghreb.

Uses:

This is a mainly agricultural area, with a 200-hectare aquaculture farm established close to the estuary. It was installed without ensuring isolation of the ponds and canals giving access to the sea and caused accelerated salination of the aquifer; this in turn has had an increasingly grave impact on the vegetation, as has become apparent over the last few months.

Local beach tourism is very important and the area of Saldia is one of the favourite attraction spots for the Moroccan population. Agricultural practices (grazing, rush and reed cutting) impact directly on the wetlands.

Dysfunctions and threats:

- a) Mobility of the dune ridge requiring dune stabilization actions.
- b) Pollution problems related to agricultural activities requiring technical solutions (reduced use of fertilizers, regulation of phytosanitary treatments) and farmers' training.
- c) Gradual encroachment of agriculture on wetlands requiring the establishment of a buffer zone through exchange or purchase of land parcels and the definition of specifications for the users.
- d) Salt-water intrusion problems (in connection with aquaculture activities) requiring a technical study of the pumping and discharge practices and the implementation of solutions to ensure rational, balanced activities; user specifications and alternative activities.
- e) Problems of disturbance of the avifauna (hunting, poaching, rush cutting) or illegal capture of species, which can be mitigated through the adoption and enforcement of legal regulations and the establishment of the buffer zone.
- f) Problems due to the number of visitors and the resulting degradation (waste, disturbance of the birds, etc.) which require regulating access and implementation of a waste collection and disposal system.
- g) Expansion of the Saldia urban area which can be regulated by the formulation, now in its final phase, of an urban development plan preserving the natural areas.
- h) Road infrastructure between Tangiers and Oujda in its planning phase.
- i) Problems of water management (two dams upstream) which can be solved through release and compensation water management, improving the pumping conditions at the aquaculture installation, and devising and implementing a water-saving irrigation system.

1.2.2 Beni Snassene

This site is located at 34°50' N 2°12' - 2°35' W. It belongs to the administrative province of Berkane.

Land tenure: Forest domain, public and private lands

Physical features: Mountainous site rising to 1,500 m, draining into the Moulouya Basin. Presence of pits and caves with numerous prehistoric implantations. Increasing tourist traffic attracted to the site, with its caves, cliffs, bluffs and forest cover.

The valley of Zegzel and the cave of Tatoralt are classified sites recognized by the Department of Culture, while the remainder of the Beni Snassene massif is yet to be granted this status.

Significance in terms of biodiversity:

Among the 67 taxa threatened globally present on the Mediterranean coast of Morocco, 7 are present at the Beni Snassene site.

PLANTS	MAMMALS	BIRDS	REPT. & AMPHIB.
<i>Euphorbia briquetii</i> (R)	<i>Myotis cappaccinii</i> (V)	<i>Falco naumanni</i> (R)	<i>Chamaeleo chamaeleon</i>
	<i>Lutra lutra</i>	<i>Milvus milvus</i> (K)	<i>Testudo graeca</i>

The letters included in parentheses after the names of the taxa indicate their IUCN status.

A total of 7 species under threat at the global level are present on the site. Most noteworthy are *Euphorbia briquetii*, a plant endemic to Morocco, and *Myotis cappaccinii*, a unique bat under threat at the global level, present on Moroccan sites. The otter *Lutra lutra* is another species adding interest to the site.

Uses:

Rangeland, hunting, crops, arboriculture, important tourism activities.

Dysfunctions and threats:

- Pollution of water streams, particularly of Oued Zegzel by solid and liquid urban waste from Taforalt, which could be regulated at the municipal level.
- Pressures from visitors (waste, pollution around a camping area, illegal camping activity) requiring stricter regulation and access control.
- Development of tourism on Oued Ferrouj.

1.2.3 Nador lagoon (Sebkha Bou Areg) and Jbel Gourougou

These two SIBEs at close proximity of each other (a few hundred metres) are obviously interrelated environmentally as regards the fresh water supply to the lagoon and sediment inputs. They are linked by a gap in the urbanized zone between Melila (Spanish enclave) and Nador, which constitutes a veritable green wedge containing protection forests and the Royal domain of Nador. These two SIBEs should logically be included in the protected area as should this intermediary zone, both from a sustainable development and land-use policy standpoint.

Nador lagoon subsite (Sebkha Bou Areg)

The lagoon is located at 34°10' N 2°45' - 2°57'E/W and belongs to the administrative province of Nador.

Land tenure: Public land

Physical features: Elongated oval-shaped lagoon (24km x 7.5km x 7m maximum depth), linked to the Mediterranean Sea by one single inlet. Separated from the sea by a thin dunal ridge of the quaternary period (24km x 1 km max x 13m maximum height) formed by sand and important mollusc shell deposits. Subdivided into 2 entities of very different size and hydrology by the small Atalayoum peninsula (itself an extension of the Gourougou massif). Inland, the area extends into the plain of Selouane, densely cultivated and irrigated. There are three major urban centres located at its immediate periphery: the port of Beni Enzar (NW), the town of Nador and its small interior harbour (W) and the village of Kariat Arkmane (SE). Also located on the lagoon shore are 2 commercial salt-water marshes: one by the town of Nador - Taouima is operational, the other at the south-western tip - Kariat Arkmane - has long been abandoned. One very important aquaculture installation.

Significance in terms of biodiversity:

Among the 67 globally threatened taxa present on the Mediterranean coast of Morocco, 16 (11 certainly and 5 possibly) are present at the Sebkha Bou Areg site i.e. 23.8% of the Mediterranean coast threatened taxa and 4.3% of all threatened taxa.

PLANTS	MAMMALS	BIRDS	REPT. & AMPHIB
<i>Centaurium barrelieroides</i> (E)	<i>Monachus monachus</i> (E)	<i>Marmaronetta angustirostris</i> (V)	<i>Testudo graeca</i> (V)
<i>Filago bolivari</i> ? (E)		<i>Numenius tenuirostris</i> ? (Cr)	<i>Chamaeleo chamaeleon</i>
<i>Linaria virgata riffea</i> ? (E)		<i>Larus audouini</i> (R)	<i>Chalcides parallelus</i>
<i>Malcolmia arenaria</i> ? (R)		<i>Falco naumanni</i> (R)	<i>Chalcides mauritanicus</i>
<i>Picris pitardiana</i> ? (E)		<i>Milvus milvus</i> (K)	
<i>Spergularia embergeri</i> (E)			

. The letters included in parentheses after the names of the taxa indicate their IUCN status.

. ? = Possible or probable presence at the site.

This portion of the site contains 4 globally threatened species of birds, 4 globally threatened reptile species and probably 6 globally threatened plant species. In addition, the monk seal has been observed occasionally and the slender-billed curlew was recently seen. This site complements efficiently the Moulouya estuary site, as these two endangered species are known on the segment of the coast including these two sites, where two reptile species, *Chalcides parallelus* and *Chalcides mauritanicus*, threatened and confined to this region of the Maghreb are also present.

A mission fielded in October 1997 noted the presence of several hundreds of *Larus audouini* on the site. This area's specificity is also due to the probable presence of 5 plant species endemic to Morocco that are classified "EN" (endangered) according to IUCN criteria: *Centaurium barrelieroides*, *Filago bolivari*, *Linaria virgata riffea*, *Picris pitardiana* and *Spergularia embergeri*.

Uses:

Aquaculture, fishing, hunting, agriculture, pastoralism.

Dysfunctions and threats:

This ecosystem's balance is predicated upon its continuous linkages with the sea, which should now be ensured as a result of the work undertaken by the Department of Public Works. However, the ecosystem is adversely affected by agricultural encroachment and the associated pollution. The sand bar is subject to aggressive impacts associated with frequentation and some types of occupancy (camping, illegal occupancy, waste, trampling, destruction and removal of fauna and flora).

Jbel Gourougou subsite.

The Jbel Gourougou subsite is located at 35°13' N, 3°00' W and belongs to the administrative province of Nador.

Physical features: Volcanic mountainous massif rising close to 900m located in immediate proximity to the Nador lagoon. This vegetation island contains a large number of highly diversified habitats; its interrelations with the Nador lagoon are important in view of the erosion phenomena and sedimentary inputs as well as fresh water supply to the lagoon which is not fed by any major stream.

Significance in terms of biodiversity:

Among the 67 globally threatened taxa present on the Mediterranean coast of Morocco, 3 are present at the Jbel Gourougou site.

PLANTS	MAMMALS	BIRDS	REPT. & AMPHIB.
		<i>Falco naumanni</i> (R)	<i>Chamaeleo chamaeleon</i>
		<i>Milvus milvus</i> (K)	

. The letters included in parentheses after the names of the taxa indicate their IUCN status.

Two globally threatened birds, the lesser kestrel *Falco naumanni* and the royal kite *Milvus milvus* are observed regularly. In addition, the chameleon *Chamaeleo chamaeleon*, threatened by trade, is also present.

Uses:

This area was previously subject to very high pressures from pastoralism, but this activity is now in sharp regression.

Dysfunctions and threats:

This area is currently proceeding with reclaiming its vegetal cover but is the subject of strong pressures from local tourism; a unique green site, it plays an important social role and requires sustainable management, including through the reintroduction of local plant species.

A large uncontrolled dump and a quarry are located on the access road to the site.

1.2.4 Cap des Trois Fourches

The land portion of this SIBE includes the extreme tip of the Cap des Trois Fourches and consists essentially of public lands. Further south lies a veritable buffer zone of private land under traditional exploitation (small parcels, manual cultivation) which, in addition to its major aesthetic interest, is a conservancy of ancient agricultural practices whose sustainable preservation is vital to the long term conservation of the site. The protected perimeter, within an appropriate zoning section, should add a peripheral zone including this area to the SIBE perimeter described below.

This site is located at 35°26' N, 2°59' W and belongs to the administrative province of Nador.

Land tenure: Public and private lands

Physical features: Rugged, craggy extremity of a powerful rocky promontory jutting out deeply into the sea. The cape contains several marine grottoes at its tip, with the floor covered with sand and pebbles, which explains the presence of monk seals observed by numerous witnesses. This small group of three to five individual probably alternates between this site and Al Hoceima.

Agricultural zone with small parcels under traditional cultivation.

Significance in terms of biodiversity:

Among the 67 taxa threatened at the global level which are present on the Mediterranean coast of Morocco, 13 (10 certainly, 3 possibly) are present at the Cap des Trois Fourches, i.e. 19.4% of the Mediterranean coast threatened taxa and 3.5% of all threatened taxa.

PLANTS	MAMMALS	BIRDS	REPT. & AMPHIB.
<i>Anthemis mauritiana</i> (E)	<i>Monachus monachus</i> (E)	<i>Larus audouini</i> (R)	<i>Chamaeleo chamaeleon</i>
<i>Calycotome chfesta intermedia grosii</i> (I)		<i>Falco naumanni</i> (R)	
<i>Carthamus rhiphaeus</i> (R)		<i>Milvus milvus</i> (K)	
<i>Filago bolivari</i> ? (E)		<i>Phalacrocorax aristotelis desmarestii</i>	
<i>Linaria virgata riffea</i> ? (E)			
<i>Minuartia senneniana</i> (R)			
<i>Picris pitardiana</i> ? (E)			

. The letters included in parentheses after the names of the taxa indicate their IUCN status.

. ? = Possible or probable presence at the site.

In all, 6 threatened plant species, 4 threatened bird species and 1 threatened reptile species are present on this site. The monk seal has also been observed occasionally and this site might provide a regular shelter for this gravely endangered species. The site owes its specificity to the probable presence of 4 plant species endemic to Morocco classified "EN" (endangered) according to IUCN criteria: *Filago bolivari*, *Linaria virgata riffea*, *Picris pitardiana* et *Anthemis mauritiana*.

Uses:

In addition to the very high pressures from fishing are steadily increasing tourism activities. Traditional agriculture.

Dysfunctions and threats:

Overfishing and prohibited fishing practices (explosives, underwater fishing, dragnets, gillnets), wild tourism (camping, illegal occupancy)

2. EXPECTED END OF PROJECT SITUATION

Developed and institutionalized a sustainable framework for the management, policies and protection of the wetland and coastal biodiversity, contributing to "closing the Mediterranean circle" in close networking with the other participating countries.

Specific achievements will be:

- Legal, regulatory and institutional instruments and tools will have been established for the protection and conservation of threatened biodiversity in the coastal and wetlands areas of the Mediterranean basin.
- Regional networks will have been established for exchange of experiences and for mutual reinforcement of actions.
- On-site protection of globally significant biodiversity will have been achieved in the project sites, and actions will have been taken to broaden these initiatives beyond the selected priority sites to others in the country.
- Improved knowledge of biodiversity, habitats and ecosystems, interlinkages, distribution, threats and uses
- Improved capacity at the local and national levels to address biodiversity issues in lateral and integrated planning levels
- A solid legal framework for the protected/conservation areas will have been established
- A detailed assessment of threatened species and appropriate measures (Management Plan) for their preservation will have been developed
- A general public awareness campaign for stressing the importance of natural environment resources protection will have been undertaken
- Grassroots involvement in biodiversity protection will have been ensured.
- A monitoring system for globally threatened biodiversity will have been set up
- A series of training for biodiversity experts and other relevant participatory bodies will have been accomplished
- Local level management structures will have been established/strengthened to ensure sustainable long term management of the globally significant biodiversity in the selected sites
- Cross-sectoral structures and policies for the effective management of biodiversity and wetland and coastal resources will have been developed
- Indirect benefits, such as human health improvements, employment creation, increased tourism, etc. will also be associated with this initiative.

3. TARGET BENEFICIARIES

The main beneficiaries are the people of Morocco who will gain from having a well-managed network of sustainable wetlands and coastal areas. Those who live in and around the sites, and those who harvest the natural resources (such as herders and fishermen) will benefit from the long term sustainable management of those resources. These are often people with precarious livelihoods.

Conservation areas are important for regional development. It is recognised that tourists and visitors are increasingly vacationing in or near to natural, unspoiled areas, many spending their holidays experiencing nature and observing wildlife. Morocco is seeking to increase nature based tourism (i.e. ecotourism) (in complementarity to the existing cultural and leisure tours) and the Mediterranean tourism sector will benefit from the proposed protected area network.

Other national beneficiaries include all the project participants: the governmental organizations, universities, scientific institutes, NGOs and national experts. At international level, exchanges between the countries involved in this project and the common approach to conserving part of the Mediterranean region's biodiversity will increase regional collaboration and the cross-fertilization of ideas and approaches. At the level of the individual participants this will broaden understanding of others problems, break down cultural or political barriers, and promote the feeling of belonging to a regional network faced with, and solving similar problems.

4. PROJECT STRATEGY AND IMPLEMENTATION ARRANGEMENTS

4.1 Strategy at the regional level

The priority sites identified in each country/Authority provide the basis for urgent actions to protect threatened biodiversity. They also provide a framework to which further sites can be added in future in order to address coastal and biodiversity issues in the country/Authority in accordance with the requirements of the Convention on Biological Diversity.

The project will develop, within the Mediterranean region, the instruments and management policies for wetlands and coastal zones whose conservation is of common interest to all the riparian countries. The experience from site level will feed into the activities for addressing root causes of biodiversity loss at national level and provide the case studies necessary for justifying the need for policy change. The combination of regional, national and local activities will allow the development of a set of legal, technical, reglementary and organisational frameworks which are individually specific but which serve to achieve a common goal.

The regional team will be a full technical partner to UNDP and the executing governments/authority, to provide advice on terms of reference, project planning through the TPR and to give technical guidance to both national and local actions. The main issues to be addressed at regional level are the horizontal themes which are relevant to all participating parties and where economies of scale can be made by undertaking these activities at regional level. The project will therefore emphasise exchange of the best available experience through technical assistance and networking, regional seminars on key topics of relevance to this project, training initiatives, and publication of guidance on management issues.

The regional activities will support the national actions by promoting exchange of experience within the region and by demonstrating how different countries (from north and south) have resolved or addressed similar problems. The regional team will also seek to promote information exchange concerning project activities at regional, national and site level through web-sites on the Internet.

A number of networks exist within the region and through their key positions in these technical and political networks, the Conservatoire du Littoral and the Tour du Valat are able to mobilise their members to support country actions, and to disseminate the results of the project in ways that will benefit stakeholders in other countries. Both organisations are committed to the sustainable development of coastal and wetland ecosystems within the Mediterranean region.

4.1.1 Project implementation

The implementation structure adopted for this regional project seeks to decentralise implementation to the competent national authority for all those actions which can be managed at local level. Therefore each beneficiary country directly manages funds allocated to UNDP by GEF through a government/Authority-executed project for the national actions in Albania, Egypt, Morocco and Tunisia. In the case of Lebanon, FFEM has allocated funds to a government executed project via UNDP Beirut and the French Embassy. For the Palestinian authority PAPP/UNDP in Jerusalem will be the implementing agency, and the Regional project will be managed through UNOPS.

This "subsidiarity principle" will lead to more effective local decision-making and improved administrative efficiency. In order to achieve the added value from the regional initiative, and to avoid repeating similar errors in each country/Authority, a Regional Facilitator to organise exchange of experience and information flow for all the technical aspects of the national programmes is absolutely essential, backed by an Advisory Committee.

4.1.2 The Regional Advisory Committee

In order to maintain the coherence of the regional approach capitalising on the experience of each of its participating members, it is essential to maintain a common regional vision through the constitution of a Regional Advisory Committee. This committee will, at the highest level, ensure that this regional vision is maintained, hence providing synergy to each of the national actions (ToR in Annex 8).

The composition of the Regional Advisory Committee will include:

- One representative of each of the Ministries or entities in charge of the environment in each country/Authority (if possible the Chief or Assistant Chief of the delegation to the MAP meeting)
- The National Project Coordinator;
- GEF/UNDP,
- UNOPS
- FFEM/AFD,
- French Environment Ministry;
- The Coordinator of the Mediterranean Action Plan or his representative;
- The Secretary General of the Ramsar Convention or his representative.
- Tour du Valat
- Conservatoire du Littoral

The *Regional Advisory Committee* may invite the participation, at their own expense, of other partners or qualified authorities: European Union, IUCN, WWF or any other person whose presence might be considered appropriate.

The expenses incurred by the members of the *Regional Advisory Committee* for their participation in the Committee's annual meeting are charged to their respective national budgets.

4.1.3 The Regional Facilitator

The need to establish networks linking all the actors in each country/Authority and the organisation of training, exchanges and the monitoring of coherence requires the establishment of a regional focal point : the regional facilitator is recruited to this effect.

The facilitator will assist each government/authority to reach the objectives fixed within the framework of the project in collaboration with the different national UNDP representations and those of the French GEF (as appropriate). This task is essentially a technical one, and implies no administrative control over expenditure of the national/Authority components. The regional facilitator will monitor the use of UNDP funds and will report on the implementation of planned project activities.

He/she will maintain direct contact with all project participants in each country/Authority at local and national level, including all concerned Ministries and agencies, the UNDP office and the local representatives of French GEF. The national coordinators will provide the Regional Facilitator with all the information necessary to his/her mission. They will transmit a copy (in paper and digital form) of all the technical studies, project reports, minutes of meetings from local site and national steering committees, and any other documents required for efficient monitoring of project activities. The ToR are outlined in Annex 5 to this document.

At the end of the project, the results from the whole project are reviewed at regional level and a summary of case studies and lessons learned is made by the Regional Facilitator. This summary will be distributed throughout the region through existing networks.

Roles of Tour du Valat and Conservatoire du Littoral.

The tasks entrusted to the Regional Facilitator will be numerous and varied. He/She will be supported in his/her activities by a team of experts in training, wetland management, biodiversity, integrated management of coastal areas and land-use policies. All of these experts will make their technical knowledge available to the Facilitator to support the development of regional activities and will also provide access to their own regional expert networks. The technical coordination of this team of experts will be ensured by Tour du Valat/MedWet for the wetland component and the Conservatoire du Littoral for matters pertaining to coastal management and the development of land policies.

There are numerous networks in place in the Mediterranean region and, thanks to their central position within those technical and institutional networks, the Conservatoire du littoral and the Tour du Valat Centre are able to support the project by calling on their counterparts throughout the region. These two not-for-profit organizations were created for the purpose of conducted integrated actions for the development of coastal areas and wetlands and to protect biodiversity.

4.2 Strategy at the national level

After a detailed assessment of the local threats to biodiversity on each of the selected sites, the project will identify and apply the innovative tools required for integrated management, including particularly the use of land policies complementing the regulatory system and through formulating adequate policies for wetland management. It will endeavour to develop those management systems and to build capacity both at the national and local levels, and will focus on awareness-raising, information and participation of the various stakeholders, especially at the local level, whose involvement in the project will create the conditions required for its success and replicability to other sites along the national coastline and in the Mediterranean region.

Innovative management and concertation policies will be implemented, beginning at sites with special significance for global biodiversity, whose protection could not be initiated rapidly without GEF support, as national resources are required elsewhere for extremely urgent interventions. These will serve as prototypes to be replicated at the national level, similar to those implemented in the other countries involved in the GEF project and will provide models for the entire Mediterranean basin.

These national actions are only one of the sub-sets of the regional action which will ensure the establishment of networks, create common information and evaluation systems, arrange for training activities and provide the required technical coordination.

4.3 Institutional framework for project implementation

4.3.1 At the local level

4.3.1.1 - Management and implementation

In view of the administrative organization, the absence of a decentralized entity of the Ministry in charge of the environment and the geographic proximity of the sites, the local project management tasks will be carried out, under the authority of the Project Manager, by the Regional Director of Water and Forestry of the Oriental District (Oujda) in his/her capacity as *Local Coordinator*.

A convention between the Ministry in charge of the environment and the Directorate of Water and Forestry sets forth the practical modalities of this decentralization arrangement.

The *Local Coordinator* is responsible for the control, assistance, coordination and technical and financial support of two entities, the *Local Operational Units* established with the Water and Forestry districts of Nador and Berkane respectively.

Local Coordinator

- ◆ Ensures the implementation and monitoring of project activities in the provinces of Nador and Berkane, in conformity with the yearly programme adopted by the Project Steering Committee. In this capacity, he/she is responsible for the activity of both Local Operational Units.
- ◆ Ensures secretarial support, and administrative and accounting control of the project at the local level.
- ◆ Manages the decentralized funds allotted to the project after the programme has been approved by the Steering Committee. For this purpose, he/she will open an account where the funds advanced in conformity with donors' accounting procedures will be deposited;
 - He/she manages the funds allocated by the Project Manager in conformity with donors' accounting procedures;
 - He/she submits quarterly financial reports to the Project Manager/National Coordinator in March, June, September and December, with the original accounting documents (estimates, purchase orders, work acceptance documents, delivery, etc.) in annex.
- ◆ Submits to the Project Manager/National Coordinator a yearly project activity schedule for the year to come, based on consultations at the local level during the meetings of the Local Management Technical Councils;
- ◆ Submits the draft yearly project activity programme to the Regional Facilitator for comment;
- ◆ Prepares the quarterly activity programme with the Local Operational Units, in conformity with donors' procedures and in concertation with the Local Management Technical Councils;
- ◆ Prepares and submits a quarterly progress report for approval to the Project Manager/National Coordinator;
- ◆ Contributes with the Project Manager/National Coordinator to the preparation of the terms of reference for the studies and work in concertation with the appropriate technical departments, the local operational units and project management;
- ◆ Organizes the calls for bids for the studies and work, subject to prior agreement of the Project Manager/National Coordinator (SEGMA department of the DOEC/ME). He/she participates in the evaluation and selection of the successful bidders, together with the Commission in charge of the opening of bids established by the National Coordinator;
- ◆ Circulates the interim study reports for comments at the local level, at the national level as needed, and upon request from the Regional Facilitator.
- ◆ Organizes and prepares, the seminars, workshops and other concertation meetings to be convened at the local level, in collaboration with the National Coordinator.

Local Operational Units of Nador and Berkane:

Under the authority of the *Local Coordinator*, the two *Local Operational Units* (Water and Forestry Districts), each headed by a *Chief Engineer*, are responsible in each province, according to the terms of reference provided in annex to this project document, for:

- ◆ The operational implementation of the project at the provincial level on the sites and complexes of sites selected;
- ◆ The animation and secretariat of each of the *Local Management Technical Councils*;
- ◆ The linkages with the socioeconomic actors and the local population groups.

Local Management Technical Councils of Nador and Berkane:

They are chaired respectively by the Governors of Nador and Berkane and are comprised of:

For the Province of Nador (Nador site / Gourougou and Cap des Trois Fourches):

- ◆ Representatives of the municipalities concerned;
- ◆ One representative of the appropriate provincial department (Environment or equivalent);
- ◆ Provincial representatives of the Ministries in charge of:
 - Agriculture and Water and Forestry;
 - Public Works;
 - Health;
 - Cultural Affairs;

- Tourism;
- Fisheries;
- National Education;
- Commerce and Industry;
- ONEP;
- ODEP;
- The Agency for development of the Northern Region;
- The University;
- MAROST, the operator of the aquaculture farm;
- Two members from the Local Concertation Committee selected in addition to the representatives mentioned above;
- As applicable and as ex-officio members, the Project Manager, the National Coordinator and the Local Coordinator

For the Province of Berkane (sites of Moulouya and Beni Snassène)

- ◆ Representatives of the municipalities concerned;
- ◆ One representative of the appropriate provincial department (Environment or equivalent);
- ◆ Provincial representatives of the Ministries in charge of:
 - Agriculture and Water and Forestry;
 - Public Works;
 - Health;
 - Cultural Affairs;
 - Tourism;
 - Fisheries;
 - National Education;
 - Commerce and Industry;
 - ONEP;
 - ODEP;
 - The Agency for development of the Northern Region;
 - The University;
 - The Regional Office for Agricultural Development of the Moulouya;
- Two members from the Local Concertation Committee selected in addition to the representatives mentioned above;
- As applicable and as ex-officio members, the Project Manager, the National Coordinator and the Local Coordinator.

These *Local Management Technical Councils* will be tasked with the monitoring of the implementation of the actions designed specifically for each site complex:

- ◆ They provide guidelines then validate and adopt the yearly and quarterly programmes of action suggested by the Local Coordinator;
- ◆ They ensure the consistency of the local sectoral policies and programmes with the primary project objective which is to preserve the sites within a sustainable development context;
- ◆ They validate studies and recommendations;
- ◆ Council members facilitate and support the implementation of project activities by mobilizing the potential existing within their administrative departments or entities;
- ◆ Council members work with the Chairman (the Governor) and the Local Coordinator (DREFO) to solve whatever problems, whether intersectoral or other, which could impinge upon the successful implementation of project activities.

These councils may procure additional services or enlist the cooperation of any qualified personality as may be required to carry out their tasks successfully.

These councils will meet upon the Chairman's request and at least twice yearly.

4.3.1.2 - Concertation

As regards concertation, in each of the two provinces concerned, a *Local Concertation Committee* will be instituted, whose membership, in addition to the members defined above (*Local Management Technical Councils*) will comprise:

- ◆ The NGOs,
- ◆ The Chambers of Commerce and Industry,
- ◆ The Chambers of Fisheries,
- ◆ The Chambers of Agriculture.

It will designate two of its members, not belonging to the Technical Management Council as representatives on the Local Concertation Committee.

This Concertation Committee will establish permanent relations with the Provincial Environment Committee immediately upon its creation, in order to formulate an approach specifically suited to the coastal areas for the development of coordinated policies.

4.3.2 Regional level

The recent creation of a regional level within Morocco, (Regional Law of 1997), with the establishment of the Regional Council, will facilitate the integration of concerns pertaining specifically to the coastal areas within a policy extending beyond the Province level. The regional executive authority is the Governor of the regional seat. In the present case, for the two provinces concerned (Berkane and Nador), he is the governor/ Wali of Oujda.

The interrelations between the Concertation Committees, the Provincial and Regional Environment Councils and the National Environment Council will be conducive to an expansion of the discussions on coastal issues.

4.3.3 National level

The owner of the project will be the Ministry in charge of the environment who will appoint as *Project Manager* the Director of Observation, Studies and Coordination (DOEC). The Project Manager will provide general direction for the project and guidelines for the Project Steering Committee, and will be responsible for the various aspects pertaining to technical and formal consultation at the international level. He will appoint and make available a *National Coordinator* who will receive the assistance of external experts on a part-time basis.

The Project Manager:

- ◆ is responsible for the management, the implementation and the finances of the project;
- ◆ convenes and chairs the meetings of the Project Steering Committee in consultation with the Departments most directly concerned;
- ◆ coordinates the elaboration of the yearly work programme, based on the proposals of the members of the Steering Committee;
- ◆ reviews and validates the quarterly programmes proposed to the Local Management Technical Councils by the Local Coordinator;
- ◆ reviews the financial reports on expenses managed by the Local Coordinator;
- ◆ reviews, adopts and approves the quarterly budgets proposed by the Local Coordinator;
- ◆ issues the calls for bids for project studies and activities;
- ◆ makes direct payments for large-scale studies and work and authorizes the Local Coordinator to make payments for small-scale studies and work;
- ◆ transmits the documents and reports requested by the donors as provided in the project document;
- ◆ hires Consultants or contracts with Consulting firms for studies and work through the SEGMA/DOEC;
- ◆ transmits the yearly work programme, as approved by the Steering Committee, to the Regional Facilitator.

The National Coordinator:

- ◆ carries out the missions entrusted to him by the Project Manager on his/her behalf;
- ◆ ensures the operational implementation of the project;
- ◆ ensures coordination between the various project actors at the national and local levels;

- ◆ performs the secretarial, administrative and accounting monitoring tasks of the project;
- ◆ supervises the Local Coordinator in order to help him implement project activities;
- ◆ ensures actual implementation of field activities;
- ◆ reviews and validates the studies elaborated within the framework of the project, after comments from the Steering Committee;
- ◆ maintains direct, permanent liaison with the project's Regional Facilitator;
- ◆ examines the candidacies of the Consultants and Consulting Firms;
- ◆ coordinates the work of the Commissions in charge of subcontracting or recruiting;
- ◆ maintains inventories of project equipment at the local and national levels;
- ◆ organizes the seminars and workshops to be conducted at the national level, in close collaboration with the members of the Steering Committee;
- ◆ prepares the documents and reports requested by the donors as provided in the project document, in close collaboration with the Local Coordinator. (Section H: Reports, monitoring and evaluation);
- ◆ ensures the implementation of the institutional capacity-building activities, in particular for the development of the component pertaining to "coastal areas and wetlands" at the Department of Environment, the National Environment Council, or any other Department or institution concerned;
- ◆ elaborates the approaches to mobilization and participation of the actors concerned by coastal areas and wetlands, in conformity with project objectives;
- ◆ will be called upon to head the future Coastal Area Unit.

A PROJECT STEERING COMMITTEE will be established at the national level; it will oversee the formulation and the implementation of the project activities as has been done during the project elaboration phase.

Its membership will consist of one permanent representative from the following departments:

- ◆ Environment (Chairmanship);
- ◆ Interior;
- ◆ Public Works (Port Authority, Equipment, Water Management, ONEP);
- ◆ Agriculture (Water and Forestry, Rural Engineering);
- ◆ Tourism;
- ◆ Higher Education (Institut scientifique de Rabat);
- ◆ Marine Fisheries;
- ◆ Health;
- ◆ Cultural Affairs;
- ◆ The Agency for the Development of the Provinces and Prefectures of Northern Morocco.

The preparation of the committee's activities and its secretariat are ensured by the Project Management/ National Coordinator. The Local Coordinator, assisted as needed by the heads of each Local Operational Units, may attend the meetings.

This Committee is responsible for steering the project; as such, it:

- ◆ validates the yearly activity programme submitted by the Project Manager;
- ◆ reviews and comments on the project progress report submitted by the Project Manager;
- ◆ monitors the application of national policies within the framework of the project;
- ◆ controls the quality of the studies of major import for site management and validates their recommendations;
- ◆ constitutes a forum for exchanges on and harmonization of the sectoral activities at the national level on the sites concerned by the project;

- ◆ initiates activities to obtain complementary funding to implement the various recommendations made by the studies (e.g. solid waste, water treatment, etc.);
- ◆ prepares an annual report on the project for the National Environment Council;

This committee may procure additional services or enlist the cooperation of any qualified personality as may be required to carry out its tasks successfully. This committee will meet upon the Chairman's request and at least twice yearly. At each meeting, minutes of the proceedings will be recorded.

Concertation:

The *National Environment Council* has a major role to play in the development of an integrated coastal policy. Therefore, reports will be submitted to it on the project as well as on the activities of the Provincial Environment Councils and Local Management Technical Councils.

Creation of a Coastal Area Commission, or an ad hoc entity, within the National Environment Council should be given consideration.

4.3.4 Meetings

REGULAR MEETINGS:

- The Steering Committee meets at least twice yearly.
- The two Local Management Technical Councils meet at least every quarter.
- The two Local Management Technical Councils meet jointly as a General Assembly, at least twice yearly.
- The Advisory Committees meet at least once a year.

These meetings are organized by the Local Coordinator and will receive financial support from the project.

SPECIAL MEETINGS:

The Chairman of the Steering Committee may convene special meetings whenever necessary or upon written request from one fourth of the membership of the Steering Committee.

The chairman of each Local Management Technical Committee may convene special meetings whenever necessary and in particular upon request of the Local Coordinator or from one fourth of the membership of the Committee.

The Local Coordinator may convene special meetings of the Advisory Committees whenever necessary.

4.3.5 Local actors' participation

Modalities for the participation of the population and local actors must be developed within the framework of participatory approaches, with the establishment of Village Committees, Fishermen's Committees, Farmers Committees, Craftsmen's Committees, etc., building upon national and Mediterranean experience in this area. Particular attention will be given to offering alternative solutions whereby the local population will cease to exert pressures on biodiversity (consumption of various natural fuels, waste management, etc.).

5. REASONS FOR ASSISTANCE FROM UNDP AND FFEM

The narrow Mediterranean coastline and its associated wetlands is a limited area increasingly colonised by human presence. The most frequent, and irreversible, trend is urbanisation which wipes out the potential for biodiversity and natural habitats.

This occupation of space is virtually irreversible as a return to natural habitats is largely impossible. At the other end of the spectrum, however, other dangerous threats, for example pollution, can be reversed with appropriate resources. It is therefore essential to develop planning and management policies, natural resource management and sustainable development initiatives that aim to limit the loss of natural habitats, especially wetlands.

All the beneficiaries of this project have ratified the Convention on Biological diversity, and the Ramsar Convention. This project also complies with principles of biodiversity protection, the GEF operational strategy and the programmes on coastal, marine and freshwater agreed at the second conference of the parties to CBD (Jakarta, Indonesia, Nov. 1995).

The incremental contribution of the GEF and FFEM will accelerate the implementation of policies whose costs could not otherwise be carried by the states alone, considering the substantial funds committed by them to address existing brown issues.

In addition, the development of pilot management methods for the coastal zone, and the development of structured exchanges through a regional network, will allow a number of Mediterranean countries to avoid the need to reinvent the wheel in addressing their own national issues, hence promoting accelerated replication of experience gained elsewhere.

6. SPECIAL CONSIDERATIONS

During the implementation of the project, specific emphasis will be put on strengthening the dialogue, information exchange and cooperation among all the relevant stakeholders, including central and local governmental, non-governmental, academic, and private sectors.

The ultimate criteria of success will be how the results of the project will be incorporated in the broader development goals of Morocco. The project tries to address this by establishing an institutional framework for cooperation and involvement of all the relevant partners.

7. COORDINATION ARRANGEMENTS

At the national level, the project will benefit from similar experiences in terms of site management, through the establishment of close contacts with managers or actors associated with coastal areas or wetlands (Ramsar sites: Merja Zerga, Khnifiss lagoon, Sidi Boughaba and Afennourir lakes, Al Hoceima Park, Atlantic Coast National Park close to Tangiers supported by the German Cooperation Agency).

In addition, it will benefit from the inputs of the various ministerial departments within the Steering Committee, which will allow for the harmonization of the various sectoral policies within the project area.

At the Mediterranean level, beside the constant information exchanges between the six participating countries/territories, the project will establish relations with the Mediterranean Commission on Sustainable Development (MCSD) of MAP, METAP, and the various programmes undertaken by a number of donors, as well as with initiatives targeting the Mediterranean region such as those undertaken by IUCN or conducted by the WWF. These networking activities will be one of the missions assigned to the Regional Facilitator.

8. COUNTERPART SUPPORT CAPACITY

The Department in charge of the environment, in addition to the creation of a specific legal and institutional context, has plans for the development of decentralized administrative entities at field level. This will complement the action undertaken by the Department of Water and Forestry to ensure the sustainability and replicability of the project.

I. DEVELOPMENT OBJECTIVES

The project's overall development objective is to conserve globally endangered species and their habitats, recognising nature conservation as an integral part of sustainable human development while improving the capacity of governmental and non-governmental agencies to address biodiversity conservation issues.

D. IMMEDIATE OBJECTIVES, OUTPUTS AND ACTIVITIES

1. Promotion and capacity building for development of national policies to address policy-related root causes of the loss of wetland and coastal biodiversity.

The project aims at establishing the institutional, legal and regulatory means required to address the root causes of biodiversity degradation and to bring specific solutions for the management of coastal areas and wetlands, integrating the protection of biodiversity as a priority.

Output 1.1 (FFEM Contribution): Development of a coherent legal and regulatory framework using in particular land policies to allow, in addition to the regulations in effect or to be established (urbanism, law on coastal areas, etc.), the acquisition, the protection and the sustainable management of the use of public or private lands required for the protection and the preservation of ecosystem biodiversity in the coastal areas and wetlands.

Activity 1.1.1: Review and analyze existing legislation (property rights, nature protection, water and wetlands, urban planning, coastal planning, tourism, waste disposal and other relevant issues) in connection with the development and the environment of coastal areas.

This activity will require the input of international expertise common to several countries to complement national capacities.

Activity 1.1.2: Propose measures for addressing the gaps in the existing legal and regulatory framework linking long-term biodiversity protection to sustainable development in sensitive sites. This activity will require the input of international expertise common to several countries to complement national capacities.

Activity 1.1.3: Assistance to interministerial drafting of legal and regulatory texts, in cooperation with national legal experts and in collaboration with the various ministries and authorities concerned.

Responsible party: Project Manager and National Coordinator

Output 1.2 (FFEM Contribution): Creation of a *Coastal Area Unit* within the Ministry of Environment at ONEM. Efforts must be made to ensure the institutional and operational development of this entity and to allow it to adopt and adapt the most appropriate instruments to evaluate, monitor, control, foresee and plan the integrated development of the Moroccan coastal areas.

Activity 1.2.1: Technical assistance aimed at creating a *Coastal Area Unit* within the Ministry of Environment at ONEM.

The Coastal Area Unit will eventually be the extension of the national project coordination structure. It will need to provide the means to better assess, monitor, control, foresee and plan the integrated development of the Moroccan coastal areas.

As regards wetland monitoring, a 2-week training session will be conducted by a MedWet expert to familiarize the Coastal Area Unit with the operation and use of the MedWet database. A local consultant will be needed for initial data gathering.

Activity 1.2.2: A consultant will provide assistance to the Coastal Area Unit, with the specific mission of developing an operational methodology for the Unit; he will then provide support, through a programme of annual visits, to establish and develop relations between the project's local and national levels. He will call

upon an expert in coastal area integrated management to reinforce this approach as applied to the Mediterranean coast of Morocco.

Responsible party: Project Manager and National Coordinator

Output 1.3 (GEF Contribution): Development of the “National Strategy for wetland conservation” in conformity with the obligations undertaken by the Parties to the Ramsar Convention

The Ramsar Convention provides for the creation by the Contracting Parties of a national strategy aimed at ensuring the rational use of all wetlands located within their territory.

This strategy will include an evaluation of the impact of public policies on wetlands and will be aimed at integrating the sectoral interests influencing the use of water and areas currently occupied by marshes, lagoons and other wetlands. It will endeavour, through studies and detailed proposal, to balance local development, the use of the water resource and the protection of wetlands within the context of sustainable development.

This strategy, which will benefit from the inputs of the innovative approach implemented in Moroccan wetlands, will be elaborated within the National Sustainable Development Commission where all actors involved in water issues are represented.

Activity 1.3.1: Analysis of the existing policies and legislation regarding the protection and development of the wetlands and the management of water resources, and assessment of their impact on the country’s wetlands.

Identification of factors leading to the loss or degradation of the country’s wetlands.

Activity 1.3.2: A national seminar to discuss the strategy to be formulated for wetlands. This seminar will involve the line ministries and technical services concerned by the issues of water management and use and will endeavour to balance the preservation of wetlands with a rational use of water resources.

Dissemination of the contents of the discussions on the “national strategy for wetlands”, through the production and publication of information monographs and of the text of the National Strategy of Morocco for Wetlands.

Activity 1.3.3: Definition, elaboration and proposal of a legislative and regulatory framework providing the basis for a durable, efficient protection of wetlands with significant biodiversity. This framework will comprize a formal “National strategy for wetlands”, emphasizing the need to take into consideration the specific features of these special areas in development projects and the corrective measures to be applied in order to mitigate their degradation.

This activity will require the input of international expertise, common to several countries if possible, to complement national capacities.

Responsible party: Sustainable Development Network and Ministry in charge of Environment.

Output 1.4 (GEF Contribution): Definition and proposal regarding appropriate methodology tools for the establishment of local Agenda 21 programmes responding, inter alia, to the needs of the areas of concern within this project and such as could be duplicated in other areas of Morocco.

The local Agenda 21 programmes are tools for the efficient fight against the threats on biodiversity and their root causes, while retaining or enhancing local capacities for economic and social development.

These documents will be established according to the principles set forth in Rio in 1992 within the framework of the Agenda 21 programme, adapting them to the local legislation as defined in the prior exercise aimed at defining the legislative framework.

Activity 1.4.1: This activity will lead to the drafting of a methodology manual, describing the procedures and emphasizing pragmatic approaches to facilitate the implementation of local agendas for sustainable development in Morocco.

This activity will be conducted on an experimental basis in the coastal areas of the provinces of Nador and Berkane; its purpose will be to harmonize the various development and protection policies over the entire area in order to foster and optimize measures in favour of the protection of biodiversity. It will thus serve as a pilot activity initiating the creation of local Agenda 21 programmes, according to the obligations of the signatories of the Rio conventions (Agenda 21).

Responsible party: Project Manager and Sustainable Development Network

- 2. Prompt implementation of urgent measures required for the protection and removal of root causes in key demonstration sites selected in view of their global significance and of their variety in terms of threats and accompanying actions.**

The selected sites are pilot sites whose purpose is to serve as examples for Morocco, but also for the entire Mediterranean Basin. The economies of scale achieved as a result of the exchanges of information and the parallel development of projects to protect coastal and wetland ecosystems will make it possible to protect other areas subsequently.

Output 2.1: (GEF Contribution): Establishment of local coordination capacities within the Directorate of Water and Forestry of the Oriental.

Activity 2.1.1: Recruitment or assignment of technical administrative personnel and field staff. Elaboration of a convention between the Ministry in charge of the Environment and DREFO, regarding the status and terms of reference of the Water and Forestry personnel.

Responsible parties: Project Manager and National Coordinator

Output 2.2 (GEF Contribution): Establishment of the 2 *Local Operational Units* at Berkane and Nador.

Activity 2.2.1: The Local Coordinator will be responsible for the creation of the *Local Operational Units*, to be recruited directly or indirectly (NGO, other administrative entity) and to establish the specifications defining the modalities of their collaboration.

The involvement of the local population, and particularly of women, in the recruiting activities will be facilitated.

Activity 2.2.3: "Induction" training for the Operational Units and the Local Coordinator and familiarization with land management as targeted by the project.

The training will be associated with the provision of the basic written material (scientific and pedagogic) required to initiate the management of the sites or site complexes: publications, guidelines, etc. This material will be provided during the induction training. The preparation of the "induction" packet will be undertaken by the Regional Facilitator.

Responsible party: Local Coordinator

Output 2.3: (GEF Contribution): Fine delineation of the sites and determination of the surface area, and granting legal protected status.

Activity 2.3.1: Surveys of the limits of the peripheral zones and exact boundary marking of the protected areas. Precise mapping of the land limits, owners and uses.

Activity 2.3.2: Review of the existing protection measures and regulations at each project site (legal mapping); assessment of their relevance and efficiency and proposals for improvement, as needed.

Based on the general legal assessment (activities 1.1.1 and 1.1.2), introduction of a draft legal text, at least with regulatory value, ensuring the durable protection of each site or site complex, including its delineation (activity 2.2.1) and appropriate zoning according to the results of the site diagnostic study.

Responsible parties: National Coordinator and Local Coordinator

Output 2.4: (GEF Contribution): Detailed diagnostic study to prepare for the management of sensitive natural areas. This study will assess the ecological status and trends and will determine the main components of a zoning plan balancing protection and development. It will define urgent measures that need to be implemented in order to stem the most serious forms of environmental degradation to protect biodiversity.

Activity 2.4.1: Definition of a computerized base map on which all field data collected during the study will be recorded and the various parameters will be monitored. The Diagnostic Coordinator will participate with a consultant working on the GIS with the Local Coordinator to establish the mapping parameters in collaboration with the MEDGEOBASE /Morocco project staff.

Activity 2.4.2: Multidisciplinary teams of national and international experts will undertake a site diagnostic study including a field inventory of the globally threatened species, the mapping of the main plant strata, the identification of all internal or external factors with a positive or negative influence on site habitats and species.

This diagnostic study will define urgent measures that need to be implemented immediately in order to stem the most serious forms of environmental degradation to protect biodiversity. It will also define the main indicators that will be used to track the changes in the sites' ecological condition, and their globally threatened wildlife (both fauna and flora).

A map based on the final delineation of the sites (Activity 2.2.1) showing a precise zoning plan of the sites will be annexed to the site classification decree(s) to be issued under Activity 2.3.2
The data will be processed on the Local Coordinator's GIS.

Activity 2.4.3: The Local Operational Units will be tasked with the mission of recording non-biological data: number of tourists, visitors, bathers, or campers, number of fishermen and catches, number of grazing animals, number and surface area of farms, etc., and to determine the trends and changes. The maps reflecting this data will be integrated in the Local Coordinator's GIS. This activity will provide a list of indicators which will be used for future site management and will be monitored throughout the project.
The data will be processed on the Local Coordinator's GIS.

Activity 2.4.4: Qualitative and quantitative analysis of the parameters characterizing water quality on the sites, and establishment of provisional water management schemes initiating urgent work which can be refined when the Integrated Management Plans are implemented.

- ◆ Collection of existing data on hydrological parameters (rainfall, evaporation, heights and flows, water table levels, water quality, levels in dam impoundments, etc.), on the existing water projects and the

use of the water resources from sensitive sites' watersheds. The sources of pollution impacting the sites and their habitats will be identified.

- ◆ The mapping data will be processed on the Local Coordinator's GIS. Field studies will need to be conducted to collect more complete data on water quality, sediments and pollutants where present (content of heavy metals, nitrates, nitrogen, phosphates, water table level, bathymetry, etc.). This diagnostic study will focus more particularly on the flow of water in the lagoons.
- ◆ Elaboration and implementation of provisional water management schemes.

This activity will also be aimed at providing a list of indicators that will be measured during this initial study and that will need to be monitored over the entire duration of the project.

The study will be conducted under the authority of the Diagnostic Coordinator.

Activity 2.4.5: Study of the potential for socio-economic development activities compatible with the preservation of biodiversity.

This study will focus in particular on the possibilities afforded by forms of ecotourism without negative effects on biodiversity.

Activity 2.4.6: A provisional management programme will be established by the Diagnostic Coordinator, taking into account the findings of the various sectoral diagnostic studies and proposing the implementation of the most urgent actions for site development and habitat rehabilitation, allowing the preservation or the increase of gravely threatened biodiversity in accordance with the results and recommendations of activities 2.4.2, 2.4.3, 2.4.4, and 2.4.5.

Responsible party: Local Coordinator and National Coordinator

Output 2.5 (GEF Contribution): Proposed policy orientations for urban development of the cities located in the periphery of the sites or site complexes, compatible with the protection of the biodiversity of the sites selected by the project.

Activity 2.5.1: Historical and prospective study of the urban evolution of the municipalities adjacent to the sites.

Activity 2.5.2: Formulation of proposal and discussion with the local authorities and the population regarding policy orientations for urban development that are compatible with the sites' long-term protection. Contribution to the elaboration or revision of the urbanism documents (as needed).

Responsible party: Local Coordinator

Output 2.6 (GEF Contribution): Elaboration of a waste management plan for the sites or site complex.

Activity 2.6.1: Analysis of waste issues (quantity, quality, change) on the site and their relations with the surrounding areas.

Activity 2.6.2: Formulation of proposal and discussion with the local authorities and the population regarding available options to implement waste management systems that are compatible with the sites' long-term protection.

Elaboration of a local waste management plan in order to eliminate uncontrolled dumping on the selected sites and to envision alternative solutions for waste management within a sustainable development context. This plan will include in particular a waste collection programme to be implemented by the inhabitants or the local micro-businesses, with provisions for the construction of 5 light ovens to incinerate the waste material.

Study of possible off-site treatment of the waste material and negotiation with the local authorities and administrative entities.

Responsible party: Local Coordinator

Output 2.7 (GEF Contribution): Equipment required for the activities and operations of the Operational Units aimed at the implementation of site or site complex management plans

Activity 2.7.1: Procurement of equipment and supplies required for the day-to-day management of the projects on each site or site complex.

As support to the population and in order to alleviate the pressures on biodiversity (fuel wood consumption, wildlife harvesting, etc.), the project will provide them with alternative solutions, in particular as improved cooking methods limiting biomass consumption, or substitute productive activities (apiaries, fruit trees, etc.) or alternate methods of waste water treatment (traditional septic tanks).

Flexibility in the selection of the equipment required for the implementation of the project will be encouraged, within the limits of the total budget allocation for equipment.

Responsible party: National Coordinator

Output 2.8 (GEF and FFEM Contribution): Elaboration and implementation of an integrated management plan for each site or site complex.

Activity 2.8.1: (GEF Contribution) Elaboration of an integrated management plan for each pilot site or site complex. These plans will define the modalities for the management of land and biological resources and for land-use (leisure activity planning, hunting, fishing, regulation of pastoral activities, overgrazing, etc.). They will establish the tasks to be undertaken and the work programme, as well as the budget allocations required for the rehabilitation and development of the sites with a view to realizing the project's objective, i.e. the preservation of wetland and coastal ecosystems.

The management plan will define the actions and orientations over a period of 5 years.

Each management plan will take into consideration the inventories, descriptions, findings and recommendations of the initial diagnostic studies, as well as those of the schemes pertaining to urban development and waste management. Each document will describe the programmes and actions to be implemented in order to obtain clear and measurable results, situating those programmes and actions within the national and regional contexts.

Activity 2.8.2: (GEF Contribution) Assistance to the Local Coordinator and the Local Operational Units to help them prepare yearly management programmes based on the five-year management plan. The yearly management programmes are aimed at facilitating the management of each site by anticipating the actions and budget needs for the year ahead, taking into account the natural and ecological variables. For this purpose, the plans and budgets will need to be flexible enough to provide for contingencies.

Activity 2.8.3: (GEF Contribution) Based on the preceding activities (2.8.1 et 2.8.2), implementation of the actions identified by the management plan and included in the yearly management programmes for the sites of Nador, Beni Snassene and Trois Fourches.

Activity 2.8.4: (FFEM Contribution) Based on the preceding activities (2.8.1 et 2.8.2), implementation of the actions identified by the management plan and included in the yearly management programmes for the Moulouya site.

Responsible party: Local Coordinator

Output 2.9 (GEF and FFEM Contribution): Infrastructure development of the sites and surrounding areas to receive the public and facilitate the management of the flow of visitors and tourists and their containment in areas defined during the elaboration of the integrated management plans. These site development activities will grant preference to local businesses whether already existing or possibly to be created.

Activity 2.9.1 (GEF Contribution) : Infrastructure development of the sites of Nador, Beni Snassene and Trois Fourches aimed at managing the flow of the visitors and users. These infrastructure components will be based upon the findings and recommendations of the diagnostic study and carried out according to the management plans.

Activity 2.9.2: (FFEM CONTRIBUTION) Infrastructure development of the site of the Moulouya aimed at managing the flow of the visitors and users. The infrastructure components will be based upon the findings and recommendations of the diagnostic study and carried out according to the management plans.

Output 2.10 (GEF Contribution): Monitoring of physical and biological parameters (according to protocols defined in Output 2.3)

Activity 2.10.1: Training sessions on scientific techniques for ecosystem and biotope monitoring. This training will target various audiences based on specific needs at each site (wardens/rangers, engineers, scientists, etc.). These needs will be assessed by the Regional Facilitator during regular missions.

The scientific monitoring operations conducted by project staff will be implemented according to established procedures and with the assistance of the University of Oujda.

Activity 2.10.2: Provision of essential monitoring instruments in order to obtain reliable data on biodiversity, physico-chemical parameters, occupancy/use, etc., so as to define appropriate management actions for the preservation of the site and its biodiversity.

Responsible party: Local Coordinator

3. Contributing to the “closing of the Mediterranean circle” in terms of biodiversity protection and sustainable management of wetlands and coastal zones through cost-effective regional networking for transfer of lessons, interchange and training

The goal, by capitalizing on local, national and regional experience, is to create a regional network capable of integrating the innovative elements of the actions conducted at these various levels, and to promote, through information, exchanges and training, a transfer of know-how so as to ensure economies of scale, replicability and synergy.

Output 3.1 (GEF Contribution): Strengthening the capacities of each of the actors of the regional network in terms of management and use of sensitive environments (coastal areas, wetlands)

Activity 3.1.1: Training of the national actors: the Coordinators, the members of Local Operational Units, the members of the local management Technical Councils, and the members of the Concertation Committees. Some of the “basic knowledge” training components have already been identified (training in biological monitoring, sensitive wetland management, management plan design, coastal area management and development). Within this pre-established programme, specific training activities will be prepared by the Regional Facilitator who will provide the trainers and didactic materials required.

Activity 3.1.2: In addition to the training sessions to be conducted under Activity 3.1.1, demand for specific training sessions for the various project actors may be expected; those needs, which will emerge from the field, cannot be determined at this point.

Therefore, provisions should be made for “customized” training programmes which will be organized by the Regional Facilitator within the framework of this mission.

These training workshops will be prepared and conducted at the request of the Moroccan party or upon a proposal from the Regional Training Team (Regional Facilitator) who will have noted the need therefor, in view of the technical problems which will arise and whose solution will require an additional input of experience and capacity-building.

Activity 3.1.3: Training sessions for professional users (farmers, fishermen, foresters, etc.) in practices for the sustainable use of the resources. They will also be geared towards the development of new activities such as ecological forest management by micro-enterprises.

This capacity-building activity will be based on training sessions organized by the Regional Facilitator according to local needs and expectations; it will be implemented by the Local Operational Units.

Responsible party: Regional Facilitator, National Coordinator

Output 3.2 (GEF Contribution): Public awareness-raising as to the importance of biodiversity preservation through activities targeting the various audiences and associating them with the project, whose success is conditional, to a large extent, upon their involvement.

Regional harmonization of the information/awareness products between the participating countries, in order to benefit from synergistic effects with regards to the image.

Activity 3.2.1: An awareness-raising programme will be implemented, with special focus on the youth and the local communities. In the design of this programme, the Project Manager will give an important role to the NGOs active in the area. The programme will focus mainly on the following themes:

Importance of biodiversity

- Site protection
- Water control
- Solid waste

Activity 3.2.2: Five awareness-raising days will be organized by the local NGOs in collaboration with the National Coordinator. In order to reinforce the roles and involvement of all actors and to raise the awareness level of the population, these awareness-raising days will also be used to inform the users and the inhabitants of the progress achieved in implementing the project.

Responsible party: Regional Facilitator, Project Manager and National Coordinator.

Output 3.3 (GEF Contribution): Participation of the Moroccan actors in and contribution to the common regional activities of the GEF and FFEM project.

Activity 3.3.1: Participation of the Project Manager, Coordinators and actors in the six 6 information exchange and training seminars and other training activities organized by the Regional Facilitator.

Activity 3.3.2: Organization and hosting of one of the 6 information exchange and training seminars with the 5 other countries/territories, whose contents and list of participants will be established in collaboration with the Regional Facilitator.

The scheduling of the six seminars will be determined in consultation with the Regional Facilitator.

Activity 3.3.3: Participation of the Moroccan responsible parties (Project Manager and National Coordinator) to the annual meeting of the Regional Monitoring Committee.

Whenever possible, these meetings will be held in conjunction with the meetings organized by the Secretariat to the Barcelona Convention.

Responsible party: Regional Facilitator, Project Manager

E. INPUTS

1. Government contribution

The amounts of the Government contribution are indicated in Moroccan dirhams (1US\$~3.35 Dh~6FF).

1.1 Personnel

Department of Environment

Profile	Number m/m	Unit Cost in Dh	Total Cost in Dh
Project Manager	60	30,000	1800000
National Coordinator	60	5,000	300000
Administrator	30	5,000	150000
Assistant Administrator	30	3,500	105000
Division Head	15	8,000	120000
Section Head	15	7,000	105000
Accountant	40	5,000	200000
Computer specialist	30	5,000	150000
Laboratory Chief	30	5,000	150000
Laboratory Technician	30	2,500	75000
Secretary	60	1,500	90000
Driver	15	1,500	22500
TOTAL			3267500

Other technical departments

Profile	Number m/m	Unit Cost in Dh	Total Cost in Dh
Hydrologist	15	8,000	120000
Geologist	15	8,000	120000
Land-use architect	15	10,000	120000
Landscape architect	15	10,000	150000
Legal expert (land-use)	30	10,000	300000
Forester	50	5,000	250000
Rural engineer	15	8,000	120000
Game warden	30	5,000	150000
Rangers	240	1500	360000
Unskilled worker	300	1500	450000
TOTAL			1735000

Operating Costs of National Coordination Team

Item	Cost / yr (Dh)	Total Cost (Dh)
Rent	50000	250000
Electricity	5000	25000
Water	5000	25000
Telephone	12000	60000
Consumables	5000	25000
Maintenance and repair	10000	50000
Insurance	10000	50000
Fuel	12000	60000
TOTAL		545000

Planned or ongoing work:

Site	Location	Type of work	Cost (in Dh)
BENI SNASSENE	Taforalt	Fight against wildfires (observation posts)	100000
		Fire trenches	140000
	Taforalt	Reforestation	600000
	Taforalt	Trail rehabilitation	120000
	Taforalt	Improvements for the Grotte aux Pigeons	8500000
	Zegzel	Reforestation	3200000
	Zegzel	Protective reforestation	1200000
NADOR		Creation of an ecotourism park	2000000
		Clean-up of the banks of the Nador lagoon	500000
TOTAL			16120000

Awareness-raising

Awareness-raising	Cost (Dh)
Television advertising spot	500000
Signage	50000
Pamphlet	30000
Poster, Sticker	100000
Publication of didactic documents	150000
Total	830000

Equipment for the National coordination team

Item	Number	Price (Dh)
Service car	01	150000
4WD vehicle	01	250000
Office furniture (general)	01	30000
Office equipment (fax, photocopier, telephone switchboard, computer hardware, etc.)	01	85000
Miscellaneous		20000
Total		535000

Information processing (GIS)

Item	Cost (Dh)
Database creation	100,000
Data entry	150,000
Analysis and processing	200,000
Total	450,000

Monitoring Programme	Cost (Dh)
Establishment of a monitoring and control programme:	
◆ Monitoring of key indicators of ecosystem evolution;	100,000
◆ Quantitative and qualitative observation of the avifauna;	50,000
◆ Control of illegal occupancy and compliance with development tools.	15,000
Total	165,000

Other Expenses

Item	Cost
Expenses for receptions and meetings	30,000
Total	30,000

TOTAL DIRECT GOVERNMENT CONTRIBUTION: Dh 23,677,500

Pollution management:

The receiving waterbodies for wastewater are the coastal lagoon, wadi Caballo and its tributaries, wadi Selouane, and the bottom of disposal wells (water table communicating with the lagoon).

The coastal lagoon, covering 10,610 hectares, is a very sensitive environment. It is currently used for aquaculture (fish, oyster, clams and shrimp) and tourism, and there are plans for aggressive development of oyster culture in the short term.

The elimination of effluents via disposal wells carries a risk of contamination of the shallow water table which communicates with the coastal lagoon.

In view of these constraints, the city of Nador has been equipped with a treatment plant of the activated sludge type.

Site	Location	Type of work	Cost (in Dh)
NADOR	City of Nador	Rehabilitation and extension of existing network	252000000
	Beni Nsar	Waste water network and treatment plant	2916000
	Selouane	Treatment plant (lagoon operation - 11500 e.p)	2690000
TOTAL			257606000

2. FFEM contribution

The amounts for FFEM contribution are indicated in French Francs (1US\$=6FF=3.35 Dh)

Output 1.1 - Development of a legal and regulatory framework

Development of a legal and regulatory framework	National / International	Number	No. m/m	Cost m/m*	Cost FF
Legal expert (administration)	International	01	2	93000	186000
Legal expert (administration)	National	01	4	24750	99000
Legal expert (environment)	International		2	93000	186000
Legal expert (environment)	National	01	2	16500	33000
Legal expert for interministerial assistance	International	01	1	93000	93000
Total					597000

*maximum

Output 1.2 - Creation of a *Coastal Area Unit* within the Ministry of Environment

Technical assistance for the creation of a Coastal Area Unit	National / International	No. m/m	Cost m/m*	Cost FF
Consultant assisting Coastal Area Unit	International	12	66000	792000
MedWet Expert	international	0.5	93000	46500
Coastal Management Expert	international	4	93000	372000
Total				1210500

*maximum

Activity 2.8.4: Based on activities 2.8.1 et 2.8.2, implementation of actions identified in the management plan and included in the yearly management programmes for the Moulouya site.

Implementation of actions envisaged under the Moulouya Management Plan	Cost FF
Implementation of Moulouya Management Plan	1203000
Total	1203000

Activity 2.9.2: Development work on the Moulouya site aimed at managing public and user flows

Development work on the Moulouya site aimed at managing visitor and user flows	Cost FF
Reception and exhibit installation	250000
Nature path (x2)	88000
Visitors' controlled areas	150000
Dune crossings	96250
Signage	90000
Installation for animal observation	100000
Total	774250

Miscellaneous	Cost FF
Miscellaneous	200000
Total	200000

TOTAL FFEM CONTRIBUTION: FF 3,984,750 (1US\$=3.35 Dh =6FF)

3. GEF contribution

The amounts of the GEF contribution are indicated in US Dollars (1US\$ ~ 6FF ~ 3,35 Dh)

3.1 Personnel

Profile	National / International	Number	Number m/m	Cost m/m	Total
Local Coordinator	National	01	40	1100	44000
Chief engineer of the Local Operational Unit	National	02	60	900	54000
Senior technician	National	04	100	720	72000
Secretary	National	01	60	200	12000
Administrative agent	National	01	60	500	30000
Ranger/Warden	National	05	300	200	60000
Total					272000

Duty travel	83000
Mission costs	80000
Mission costs (regional)	15000
Mission costs (international)	10000
Total	188000

3.2 Subcontracts

Output 1.3: National strategy for wetland conservation	National / International	No.	No. M/m	Cost m/m	Total
Wetland specialist	international	01	2	15000	30000
Legal consultant	international	01	1	15000	15000
Assessment of public policies	international				30000
Wetland workshop					20000
Dissemination of outputs					10000
Total					105000

Output 1.4: Local Agenda 21 programmes	National / International	No.	No. M/m	Cost m/m	Total
Sustainable development consultant	international	01	2	15000	30000
Methodology manual					10000
Total					40000

Output 2.3: Site delineation and protected status classification	National / International	No.	No. m/m	Cost m/m	Total US\$
Land survey	national				20000
Legal expert on environment	international		2	17000	34000
Legal expert on environment	national		6	3000	18000
Total					72000

Output 2.4:	National / International	No.	No. M/m	Cost m/m	Total
Diagnostic study					
Diagnostic Coordinator	international	01	6	17000	102000
GIS consultant	international	01	0.75	15000	11250
Botany consultant	national	01	3	3000	9000
Botany consultant	international	01	0.75	12000	9000
Herpetology consultant	national	01	2	3000	6000
Herpetology consultant	international	01	0.75	12000	9000
Ornithology consultant	national	01	2	3000	6000
Ornithology consultant	international	01	0.75	12000	9000
Mammology consultant	national	01	2	3000	6000
Team for water quality and quantity study and research	national		5	3000	15000
Team for technical study and water management plan	international		3	15000	45000
Socio-economy consultant	national		8	3000	24000
Urgent work					236750
Total					488000

Output 2.5:	National / International	No.	No. m/m	Cost m/m	Total
Policy orientations for surrounding urban development					
Urbanism consultant	national	01	4	3000	12000
Total					12000

Output 2.6:	National / International	No.	No. m/m	Cost m/m	Total
Waste Management Plan					
Waste management consultant	national	01	4	3000	12000
disposal programme	national	04			80000
Total					92000

Activity 2.8.1, 2.8.2 et 2.8.3:	National / International	No.	No. m/m	Cost m/m	Total
Management plans					
Assistance for design of management plans	international		2	17000	34000
Assistance for yearly programming	international		4	15000	60000
Implementation of Nador management plan					220000
Impl. of Beni Snassene management plan					65000
Impl. of 3 Fourches management plan					65000
Total					444000

Activity 2.9.1:	Total
Equipment for public flow management	
Installation for reception and exhibits	40000
Nature discovery trail (2 in Nador, 1 in Beni Snassene, 1 at Trois Fourches)	32000
Visitors' containment area	25000
Dune crossing equipment at Nador	20000
Signage	32000
Narrowing of exiting roads and trails at Nador	30000
Installation for fauna observation	25000

Total	204000
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Output 2.10:	National/ International	No.	Cost	Total
Ecology monitoring				
Monitoring and control programme	national	4	15000	60000
Total				60000

Output 3.1:	Cost
Awareness-raising	
Manuals and publications	46000
Awareness-raising programme	40000
Awareness-raising days (x 6)	30000
Total	116000

3.3 Training

Output 3.2:	National/ International	No.	Cost	Total
Training programmes				
"Induction" training	international	1	9000	9000
Specific training (monitoring, management of sensitive areas, management plans, coastal area development, GIS)	international	5	15000	75000
Customized training	international	7	15000	105000
Total				189000

3.4 Equipment

3.4.1 Expendable equipment

Item	Qty	Unit Price	Total
Uniforms and work clothes	70	150	10500
Binoculars	10	400	4000
Photo camera	04	400	1600
Apiaries	150	100	15000
Gas ovens	150	20	3000
Alternative plants	5000	1	5000
Septic tanks	50	300	15000
Documentation			6000
Small tools			7500
Total			67600

3.4.2 Non-expendable equipment

Item	Qty	Unit Price	Total
Service vehicle	01	15000	15000
4WD vehicle	02	22000	44000
Trail motorcycle	04	5000	20000
Microcomputer (PC) /modem	06	3500	21000
Microcomputer (PC) dedicated to GIS	02	12000	24000
Plotter	01	1500	1500
Printers	05	900	4500

Overhead projector	01	2500	2500
Projection screen	01	1000	1000
Telescope	03	1500	4500
TV set	01	1700	1700
Videocassette recorder	01	1300	1300
Camcorder	01	1800	1800
Office equipment	06	1500	9000
Boat	01	15000	15000
Light boat	01	7500	7500
Radio communication system	10	500	5000
Ground water monitoring equipment (water stage recorders, piezometers, sensors, etc.)			10000
Waste disposal ovens	5	1500	7500
Total			196800

3.5 Miscellaneous

Item	Cost
<u>Activity 3.3.2: Organizing and hosting one of the 6 regional seminars</u>	35000
Meeting expenses	18600
Communications	2000
Contingency	75000
Reporting cost	15000
Sundries	58500
Operation and maintenance	39500
UNDP Admin. Support (3%)	83700
Total	327300

TOTAL GEF Contribution: US\$2,873,700

F. RISKS

Adapting legislation and regulation concerning land-use rights is a long-term and complex process. The creation of new structures specialised in the protection of the coastline may also generate opposition within the administration and therefore requires substantial commitment from government to succeed. The support of local people and of the media may also contribute, and in this sense the image and international nature of the project is an important feature.

The active participation of local people and local government in decision-making on land-use and water issues is essential as it is at this level that the main pressures on remaining natural areas occur. This purpose is rendered difficult by lack of resources to allow full participation and the weakness of analytical, consultative and inter-administrative systems.

In addition, effective coordination between all administrative levels (local and national) is essential for project success and this will require a sustained effort from all project participants and strong political will. Building on the interest shown by all the participating countries/authority, the project preparation process has nevertheless improved the awareness of these issues and attention should remain focussed on promoting this in each of the project sites.

G. PRIOR OBLIGATIONS AND PREREQUISITES

1. Prior obligations

- ◆ Status of use and properties (availability) of land at each site.
- ◆ Guarantee that no heavy infrastructure will be constructed on the sites.
- ◆ Agreement from the various public land rightful users on the sites to refrain from assigning, exchanging or changing the uses of the public lands concerned before they are granted legally protected status.
- ◆ Information on the treatment of solid and liquid wastes around the sites and listing of actions considered by the various actors for their elimination over the next 5 years.
- ◆ Information on current and projected urban expansion plans and operations.

2. Prerequisites

- ◆ Formulation of a legal status ensuring durable protection of the sites within 2 years as of project start-up.
- ◆ Installation of the *2 Local Operational Units*, the *Local Coordinator*, the *2 Local Management Technical Committees*, the *2 Concertation Committees*, the *Project Manager* and the *National Coordinator* within 6 months of project start-up. This will be a pre-condition of the appropriation of funds for equipment goods and works as planned for the project.
- ◆ A signed agreement between the Ministry in charge of the Environment and the Directorate of Water and Forestry, setting forth the practical modalities of the decentralization arrangements and the implementation of the activities by the Local Coordinator and the Local Operational Units within the first months of project implementation.
- ◆ The staff assigned to the project and the equipment provided to the project will be dedicated exclusively to the implementation of the actions proposed within the project, and a yearly report on the use of these human and physical resources will be submitted by the National Coordinator to the Project Manager and the Regional Facilitator.
- ◆ Implementation of the process aimed at terminating illegal occupancy of public lands on the sites prior to the mid-term evaluation. This termination of illegal occupancy concerned first and foremost those activities or buildings of a commercial or speculative nature or related to leisure or aimed at deriving profits directly from the illegal activity. Illegal occupancy linked to the principal residence of low-income population groups will be accorded specific treatment, in particular by way of compensatory offers made by the competent authorities.
- ◆ Annual presentation of the work programmes, an organizational chart of the National Coordination team, the local Coordination teams and the Operational Units, and the capital budget and operation budget.
 - ◆ Initiation of the mobilization of the national counterpart contribution and other contributions.
 - ◆ Designation of wetlands under the Ramsar Convention prior to the mid-term evaluation.
 - ◆ Designation of the sites as ASPIM (MAP) prior to the mid-term evaluation.
 - ◆ Prohibition of hunting on project wetlands prior to project completion.

Assistance for the project will be provided only if the obligations and prerequisites stipulated above have been fulfilled or are likely to be fulfilled. When anticipated fulfilment of one or more prerequisites fails to materialize, UNDP may, at its discretion, either suspend or terminate its assistance.

H. PROJECT REVIEWS, REPORTING AND EVALUATION

In view of the regional nature of the project and the specific linkages between the 6 countries/territories involved, special conditions for monitoring and reporting have been established.

As has already been described in the Regional Project Document, the Regional Facilitator will provide assistance and advice and will ensure the networking of the national projects. The Regional Facilitator will be responsible for drafting and submitting various technical reports to GEF/UNDP, to UNOPS and the FFEM. In addition the Regional Facilitator will also provide comments to national *Project Reviews* and will also attend the annual meeting of the Regional Advisory Committee.

Project Review –PR (also called TPR in regular national projects)

This project will be subject to annual Project Reviews (PR) which will take place at least every twelve months, with the first such meeting to take place within the first twelve months following actual project start-up.

The participants to these Annual Project Reviews (APR) will include: representatives of the Government, the implementing agency, UNDP, FFEM secretariat and/or the French Ministry of the Environment and the Regional Facilitator. Upon the initiative of the representatives of the Government, the implementing agency, UNDP or FFEM, two national coordinators for other countries or any other national or international actor participating in the regional project may be invited to attend.

Annual Performance Report

The Project Manager will be responsible for preparing and submitting to each Project Review (PR) an Annual Performance Report (APR). Other evaluation reports may be requested, as needed, during the implementation of the project. Each project partner (representatives of the Government, the implementing agency, UNDP, FFEM secretariat – under the Agence Française de Développement – and the Regional Facilitator) as well as the GEF/RBAS New York) will be provided with copies of the Evaluation Reports before the Project Reviews (PR).

The APRs from each national project component will be submitted to the Regional Facilitator, so that she/he may write a combined and summarized APR for the entire project to be submitted to GEF/RBAS.

A project completion report will be prepared to be discussed at the last Project Review (PR). This report will need to be prepared in advance, so as to enable the implementing agency to provide technical inputs and to make comments, at least four months before this last tripartite review.

Mid-term evaluation

The project will be subject to a mid-term evaluation, i.e. during the third year after actual project start-up. The organization, the terms of reference and the timing will be determined after consultation with the participants in the APR preceding the mid-term evaluation.

The consultants who will carry out this evaluation exercise will normally be selected from the GEF STAP roster after consultation with project partners. This evaluation will be independent. Particular attention will be paid to the selection of regional consultants to the extent possible. The evaluation team will consist of no more than 3 people. The same team will visit all of the countries participating in the project in order to produce a coherent evaluation. The results of the mid-term evaluation will be made publicly available according to the GEF's principles of transparency and free access.

Clearing House Mechanism

The National Coordinator will work with the project's national partners to establish biodiversity indicators and monitoring indicators during the first year of the project. These indicators will be submitted to the Regional Facilitator for his assent as to the type of biodiversity to be monitored, the frequency of the measurements and the periodicity of the reports to be submitted to him. This information will be shared with the focal point of the "Clearing House Mechanism", GEF / UNDP and the FFEM as well as the other project partners.

The monitoring information will be reviewed and summarized by the Project Manager and submitted to the Regional Facilitator for further analysis and review.

GEF Project Implementation Review

The project will also be subject to the GEF Project Implementation Review (PIR) process. This involves filling out a computerized questionnaire (to be submitted each year in July/August). In view of the fact that this regional project will be treated as a single entity, each national component, through its National Coordinator, will submit the information required by the Regional Facilitator in a timely manner so that the GEF PIR process may be completed on time.

FFEM monitoring of FFEM-funded project activities

It should be noted that FFEM will also monitor the project components it supports. The budgetary and financial monitoring will be conducted by the Agence Française de Développement (in Tunisia and Morocco) in parallel with the monitoring process described above, in conformity with FFEM procedures. It should be noted that FFEM has accepted the principle of joint monitoring of its contributions and will therefore participate as a full partner in all monitoring activities (APR, PR, PIR, and the Regional Advisory Committee meetings, etc).

FFEM has entrusted the technical monitoring of the project to the Conservatoire du littoral, which will carry out these functions in Lebanon, Morocco and Tunisia. The technical assistance missions will be coordinated in consultation with the Regional Facilitator, UNDP and Tour du Valat in a spirit of constructive partnership, so as to avoid redundancies and duplication of efforts.

UNDP monitoring of GEF-funded project activities

Ad hoc monitoring missions may be undertaken, in coordination with the Regional Facilitator, FFEM, Tour du Valat / Conservatoire du Littoral, by the UNDP/GEF group of New York in all countries concerned by the activities funded by UNDP/GEF (Albania, Egypt, Lebanon, Morocco, Palestinian Authority and Tunisia). The UNDP Country Offices in these countries/Authority will be responsible for day-to-day monitoring and dialogue with the national authorities during the implementation of the project.

Regional Advisory Committee annual meetings

The purpose of the annual meetings of the Regional Advisory Committee is to provide a forum for dialogue contributing to a project global strategic vision, and for exchanges of ideas between the participants in order to transfer good practices and the lessons learned within each of the Mediterranean countries. The Regional Advisory

Committee may issue recommendations in line with project objectives. UNOPS and UNDP/GEF will implement them taking into consideration the existing conditions, the GEF eligibility criteria and the budget constraints.

The composition of the Regional Advisory Committee will include:

- One representative of each of the Ministries or entities in charge of the environment in each country/Authority (if possible the Chief or Assistant Chief of the delegation to the MAP meeting)
- The National Project Coordinator;
GEF/UNDP,
- UNOPS
- FFEM/AFD,
- French Environment Ministry;
- The Coordinator of the Mediterranean Action Plan or his representative;
- The Secretary General of the Ramsar Convention or his representative.
- Tour du Valat
Conservatoire du Littoral

The *Regional Advisory Committee* may invite the participation, at their own expense, of other partners or qualified authorities: European Union, IUCN, WWF or any other person whose presence might be considered appropriate.

The expenses incurred by the members of the *Regional Advisory Committee* for their participation in the Committee's annual meeting are charged to their respective national budgets.

Financial Reporting

The Government will provide UNDP with certified periodic financial statements relating to the status of UNDP/GEF funds, including an annual audit of these financial statements, according to the procedures set out in Section 30503 of the UNDP Policies and Procedures Manual (PPM) and Section 10404 of the UNDP Finance Manual, and any revision of these Manuals. The audit will be conducted by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Government.

I. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Morocco and the United Nations Development signed by the parties on 13 May 1982. The host country implementing agency shall for the purposes of the Standard Basic Assistance Agreement refer to the government cooperating agency described in that agreement.

...and participation in
LUCN, WAME or any other

The Regional ...
...and ...
...considered ...

...

...by the ...
...to ...

J. BUDGET

The Government will provide ...
...and any ...
...of the Government

...to ...
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J. Budget

Code	Description	Total		Year 1		Year 2		Year 3		Year 4		Year 5	
		m/m	US\$	m/m	US\$	m/m	US\$	m/m	US\$	m/m	US\$	m/m	US\$
10.00	Project Personnel												
13.00	Administrative support personnel												
13.01	Secrétaire (1)	60	12,000	12	2,400	12	2,400	12	2,400	12	2,400	12	2,400
13.02	Agent administratif (1)	60	30,000	12	6,000	12	6,000	12	6,000	12	6,000	12	6,000
13.99	Subtotal administrative support	120	42,000	24	8,400	24	8,400	24	8,400	24	8,400	24	8,400
15.00	Duty travel												
15.01	Duty Travel		83,000		16,600		16,600		16,600		16,600		16,600
15.99	Subtotal duty travel	0	83,000	0	16,600	0	16,600	0	16,600	0	16,600	0	16,600
16.00	Mission costs												
16.01	Mission costs		80,000		16,000		16,000		16,000		16,000		16,000
16.02	Evaluation		15,000						15,000				
16.99	Subtotal mission costs	0	95,000	0	16,000	0	16,000	0	31,000	0	16,000	0	16,000
17.00	Long Term National Professionals												
17.01	Coordinateur Local (1)	40	44,000	8	8,800	8	8,800	8	8,800	8	8,800	8	8,800
17.02	Ingénieur Chef Cellule Opérationnelle Locale (2)	60	54,000	12	10,800	12	10,800	12	10,800	12	10,800	12	10,800
17.03	Technicien supérieur (4)	100	72,000	20	14,400	20	14,400	20	14,400	20	14,400	20	14,400
17.04	Garde (5)	300	60,000	60	12,000	60	12,000	60	12,000	60	12,000	60	12,000
17.99	Subtotal NPPP	500	230,000	100	46,000	100	46,000	100	46,000	100	46,000	100	46,000
19.00	Personnel component total	620	450,000	124	87,000	124	87,000	124	102,000	124	87,000	124	87,000
20.00	Sub-contracts												
21.00	Sub-Contract A - Stratégie Nationale Zones Humides												
21.01	Etudes et évaluations		75,000	1	35,000	2	40,000						
21.02	Dissémination des résultats		30,000				20,000		10,000				
21.99	Subtotal Sub-Contract A - Stratégie Nationale Zones Humides		105,000	1	35,000	2	60,000	0	10,000	0	0	0	0
22.00	Sub-Contract B - agendas 21 Locaux												
22.01	Consultant développement durable		30,000							1	15,000	1	15,000
22.02	Guide méthodologique		10,000										10,000
22.99	Subtotal Sub-Contract B - Agendas 21 Locaux		40,000	0	0	0	0	0	0	1	15,000	1	25,000
23.00	Sub-Contract C - délimitation des sites et statut de protection												

23.01	Analyses foncières	20,000		20,000										
23.02	Juriste environnement (I)	52,000	6	46,000	2	6,000								0
23.99	Subtotal Sub-Contract C - délimitation des sites et statut de protection	72,000	6	66,000	2	6,000	0	0	0	0	0	0	0	0
24.00	Sub-Contract D - Diagnostic													
24.01	Coordinateur diagnosticien	102,000	4	68,000	2	34,000								
24.02	Consultants diagnostic	89,250		74,250		15,000								
24.03	Analyse et plan de gestion des eaux	60,000		30,000		30,000								
24.04	Travaux urgents	236,750		36,750		150,000		50,000						
24.99	Subtotal Sub-Contract D - Diagnostic	488,000	4	209,000	2	229,000	0	50,000	0	0	0	0	0	0
25.00	Sub-Contract E - Développement urbain													
25.01	Consultant urbaniste	12,000			4	12,000								
25.99	Subtotal Sub-Contract E - Développement urbain	12,000	0	0	4	12,000	0	0	0	0	0	0	0	0
26.00	Sub-Contract F - gestion déchets													
26.01	Consultant déchets	12,000			4	12,000								
26.02	programme de ramassage	80,000				10,000		30,000		25,000		15,000		
26.99	Subtotal Sub-Contract F - gestion déchets	92,000	0	0	4	22,000	0	30,000	0	25,000	0	15,000	0	15,000
27.00	Sub-Contract G - Plans de gestion													
27.01	Assistance conception plans de gestion	34,000				34,000								
27.02	Assistance programmation annuelle	60,000			1	15,000	1	15,000	1	15,000	1	15,000	1	15,000
27.03	Mise en œuvre plan de gestion Nador	220,000						90,000		80,000		50,000		
27.04	Mise en œuvre plan de gestion Beni Snassen	65,000						30,000		20,000		15,000		
27.05	Mise en œuvre plan de gestion 3 Fourches	65,000						30,000		20,000		15,000		
27.99	Subtotal Sub-Contract G - Plans de gestion	444,000	0	0	1	49,000	1	165,000	1	135,000	1	95,000	1	95,000
28.00	Sub-Contract H - Aménagements gestion du flux du public													
28.01	Local d'accueil et d'exposition	40,000						30,000		10,000				
28.02	Aménagement pour visiteurs	164,000						102,000		59,500		2,500		
28.09	Subtotal Sub-Contract H - Aménagements gestion du flux du public	204,000	0	0	0	0	0	132,000	0	69,500	0	2,500	0	2,500
28.10	Sub-Contract I - Suivi Ecologique													
28.11	Programme de suivi	60,000				15,000		20,000		15,000		10,000		
28.19	Subtotal Sub-Contract I - Suivi Ecologique	60,000	0	0	0	15,000	0	20,000	0	15,000	0	10,000	0	10,000
28.20	Sub-Contract J - Sensibilisation													
28.21	Guides et publications	46,000				10,000		15,000		15,000		6,000		
28.22	Programme de sensibilisation	70,000				15,000		25,000		25,000		5,000		
28.29	Subtotal Sub-Contract J - Sensibilisation	116,000	0	0	0	25,000	0	40,000	0	40,000	0	11,000	0	11,000
29.00	Component total	1,633,000	11	310,000	15	418,000	1	447,000	2	299,500	2	158,500	2	158,500

30.00	TRAINING												
33.00	In-service training												
33.01	Formation prise de poste	9,000		9,000									
33.02	Formations spécifiques (5)	75,000		15,000		15,000		15,000		15,000		15,000	
33.03	Formations sur-mesure (7)	105,000				30,000		30,000		30,000		15,000	
33.99	Subtotal In-service training	189,000	0	24,000	0	45,000	0	45,000	0	45,000	0	30,000	
34.00	Conferences and Meetings												
34.01	Séminaires régionaux	35,000		35,000									
34.02	Frais de réunions	18,600		3,900		3,900		3,900		3,900		3,000	
34.99	Subtotal Conferences and Meetings	53,600	0	38,900	0	3,900	0	3,900	0	3,900	0	3,000	
39.00	Component total	242,600	0	62,900	0	48,900	0	48,900	0	48,900	0	33,000	
40.00	Equipment												
41.00	Expendable equipment												
41.01	Uniformes et vêtements de travail (70)	10,500		5,500						5,000			
41.02	Jumelles (10)	4,000		4,000									
41.03	Appareils photos (4)	1,600		1,600									
41.04	Ruchers (150)	15,000						15,000					
41.05	Fours à gaz (150)	3,000				3,000							
41.06	Plantations alternatives (5000)	5,000						5,000					
41.07	Fosses septiques artisanales	15,000				10,000		5,000					
41.08	Documentation	6,000		2,000		1,000		1,000		1,000		1,000	
41.09	Divers petit matériel	7,500		3,500		1,000		1,000		1,000		1,000	
41.99	Subtotal Expendable equipment	67,600	0	16,600	0	15,000	0	27,000	0	7,000	0	2,000	
42.00	Non-expendable equipment												
42.01	Véhicules	79,000				79,000							
42.02	Micro ordinateur et accessoires	51,000		39,200		11,800							
42.03	Matériel Vidéo	12,800				4,500		8,300					
42.04	Equipement de bureau (6)	9,000		6,000		3,000							
42.05	Bateaux	22,500						22,500					
42.06	Système de communication (10)	5,000				5,000							
42.07	Equipement de suivi et contrôle des nappes	10,000		3,000		7,000							
42.08	Fours d'élimination des déchets (5)	7,500						7,500					
42.99	Subtotal Non-expendable equipment	196,800	0	48,200	0	110,300	0	38,300	0	0	0	0	
49.00	Component total	264,400	0	64,800	0	125,300	0	65,300	0	7,000	0	2,000	
50.00	Miscellaneous												

K. ANNEXES

#	Objectives	Expected results	Activities	Year 1				Year 2				Year 3				Year 4				Year 5			
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
32			2.4.3/ Non-biological data collection																				
33			2.4.4/ Diagnostic study of water quality and quantity																				
34			2.4.5/ Study of potential for socio-economic development																				
35			2.4.6/ Elaboration of provisional management programme and urgent actions																				
36																							
37		Output 2.5	<i>Proposed urban development of peripheral zones.</i>																				
38			2.5.1/ Historical and prospective study of urban evolution																				
39			2.5.2/ Proposal formulation and discussion with local authorities and population																				
40																							
41		Output 2.6	<i>Waste management plan</i>																				
42			2.6.1/ Analysis of waste issues																				
43			2.6.2/ Proposal formulation and discussion with local authorities and population																				
44																							
45		Output 2.7	<i>Equipment required for the implementation of the management plans</i>																				
46			2.7.1/ Procurement of equipment and supplies																				
47																							
48		Output 2.8	<i>Elaboration and implementation of integrated management plans</i>																				
49			2.8.1/ Elaboration of integrated management plans																				
50			2.8.2/ Yearly assistance for management programme preparation																				
51			2.8.3/ Implementation of actions identified at Nador, Beni Snassène and Trois Fourches																				
52			2.8.4/ Implementation of actions identified at the Moulouya site																				
53																							
54		Output 2.9	<i>Site infrastructure development to accommodate the public</i>																				

Annex 11: Schedule of project reviews, reporting and evaluation

Conservation of Wetland and Coastal Ecosystems in the Mediterranean Region MOR/97/G33/A/1G/99																					
	Activities	Year 1				Year 2				Year 3				Year 4				Year 5			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Project initial report																				
2	APR – Annual Performance Report																				
3	TPR – Annual Project Reviews																				
4	APR – Annual Performance Report																				
5	TPR – Annual Project Reviews																				
6	APR – Annual Performance Report																				
7	mid-term Evaluation																				
8	APR – Annual Performance Report																				
9	TPR – Annual Project Reviews																				
10	APR – Annual Performance Report																				
11	TPR – Annual Project Reviews																			9/ 1	

Annex III. Training activities

Training is an essential component of this project as its success or failure hinges on the ability of the site managers to address the threats to the different sites in a sustainable manner. This will, in many cases, require personnel to acquire new skills and especially to develop the habit of intersectoral collaboration and decision-making in their daily activities. The programme has components aimed at training of trainers, but will also directly train national staff through an appropriate training focal point. The training programme does not aim to train large numbers of people in generalities, but rather to assist either specialists to adapt their knowledge to new situations, or to give generalists some specific understanding of how to manage coastal and wetland sites. Cross-cultural (inter-disciplinary) training will be emphasized as an aid to multi-sectoral planning.

The training component of the programme has four main aims:

1. Support to the development of a training focal point for protected areas management in each country.
2. Training as a means to acquire knowledge and methodologies appropriate to intersectoral management planning for coastal and wetland areas.
3. Training as a tool within the site management process (i.e., as an opportunity to put stakeholders around a table and to promote exchanges on a topic of common concern as a way to remove obstacles in the management process "creating a common culture").
4. Promote the capacity of a national institution to provide training sessions for wetland and coastal conservation

For the training programme to be effective, it requires to be clearly focussed on needs at local level. These needs can be expected to evolve during the project cycle, and the intervention of the training activities must therefore be developed and applied on an annual basis. For example, when the site management committees are convened, a training session may be organised in order to create a "common culture", and to help the local dynamics of management plan preparation and implementation. The precise needs of the members of that committee can only clearly be identified once it is established.

The training programme will emphasise a hands-on practical problem-solving style, with "general knowledge" issues kept to a minimum. This means that it will also be strictly targeted at those who will use their improved skills in their daily work. Selection of the profile of trainees will therefore be decided in consultation with the regional training team to ensure maximum effectiveness.

The regional team will provide the design, content and material for the local training courses, while all the local costs will be covered by the national budget. To facilitate the implementation of the courses and improve capacity-building at national level, a training focal point will be designated by the National Project Director. This focal point will be responsible for mobilising national experts to deal with different themes, when such expertise is available locally, and for ensuring the smooth local logistics of the training operation.

In addition to the local courses, six regional courses will be held on the following themes :

1. Designing a national wetland strategy
2. Coastal zone planning tools
3. Integrated management planning
4. EIA techniques for Mediterranean wetlands
5. Design of public awareness programmes

6. Organising applied research on biodiversity conservation

These courses will be geared towards information, knowledge and understanding existing tools and methods, and will improve the participants' awareness of similar activities ongoing at a regional level. Information materials and documentation will be distributed at these meetings. Countries other than the beneficiaries may also participate with the agreement of the regional facilitator if they cover costs, in order to promote the regional nature of the action.

The content and design of the courses will be defined by the regional team, who will establish the nature of the key target beneficiaries, define training needs and select candidates with the required profile in consultation with the National Project Director.

One course will be held in each participating country/Authority at or near a project site and will hence allow project participants to familiarize themselves with other sites in the network

Annex IV. Equipment

4.1 Expendable

Item	Number	User
Uniforms and work clothes	35	Nador Operational Unit
Uniforms and work clothes	35	Berkane Operational Unit
Binoculars	5	Nador Operational Unit
Binoculars	5	Berkane Operational Unit
Photo camera	02	Nador Operational Unit
Photo camera	02	Berkane Operational Unit
Apiaries	150	Local Coordination (DREFO)
Gas ovens	150	Local Coordination (DREFO)
Alternative plants	5000	Coordination Locale (DREFO)

4.2 Non-expendable

Item	Number	User
Service vehicle	01	Local Coordination (DREFO)
4WD vehicle	01	Nador Operational Unit
4WD vehicle	01	Berkane Operational Unit
Trail motorcycle	02	Nador Operational Unit
Trail motorcycle	02	Berkane Operational Unit
Microcomputer (PC) /modem	02	National Coordinator
Microcomputer (PC) /modem	02	Local Coordination (DREFO)
Microcomputer (PC) /modem	01	Nador Operational Unit
Microcomputer (PC) /modem	01	Berkane Operational Unit
Microcomputer (PC) – GIS dedicated	02	Local Coordination (DREFO)
Plotter	01	Local Coordination (DREFO)
Printer	03	Local Coordination (DREFO)
Printer	01	Nador Operational Unit
Printer	01	Berkane Operational Unit
Overhead projector	01	Local Coordination (DREFO)
Projection screen	01	Local Coordination (DREFO)
Telescope	01	Nador Operational Unit
Telescope	01	Berkane Operational Unit
Telescope	01	Local Coordination (DREFO)
TV set	01	Local Coordination (DREFO)
Videocassette recorder	01	Local Coordination (DREFO)
Camcorder	01	Local Coordination (DREFO)
Office equipment	02	Nador Operational Unit
Office equipment	02	Berkane Operational Unit
Office equipment	02	Local Coordination (DREFO)
Boat	01	Nador Operational Unit
Light boat	01	Berkane Operational Unit
Radio Communication System	4	Nador Operational Unit
Radio Communication System	4	Berkane Operational Unit
Radio Communication System	2	Local Coordination (DREFO)
Ground water monitoring equipment (water stage recorders, piezometers, sensors, etc.)		Local Coordination (DREFO)
Waste disposal ovens	5	Local Coordination (DREFO)

DESCRIPTION OF EQUIPMENT

- a) **Service vehicle:** Engine displacement < 1500cm³ / 4 doors / 2WD / 4 seats
- b) **4WD vehicle:** Diesel engine / 6 cylinders / 2 or 4 doors /
- c) **Trail motorcycle:** Engine displacement < 200 cm³ / Trail type
- d) **Micro-computer:** Minimum configuration: IBM-compatible / 166 MHz / 2 GB HD / 32 MB RAM / 14 or 15" VGA or SVGA monitor / 56 Kbps modem / 8X CD-ROM drive / B&W printer.
- e) **GIS dedicated micro-computer:** Minimum configuration: IBM-compatible / 200 MHz / 2.5 GB HD / 32 or 64 MB RAM / 16" VGA or SVGA monitor / 56 Kbps modem / 10X CD-ROM Drive / Colour printer
- f) **Plotter:** PC compatible, dedicated to GIS / Colour / up to A0 if possible
- g) **AV Equipment:** Pal - Secam compatible / VHS video / 24" TV monitor
- h) **Boat:** Inflatable craft with outboard motor 100HP max. / trailer / safety equipment / 6 people capacity
- i) **Light boat:** Inflatable or hard hull craft with outboard motor 9.9HP max. / trailer / safety equipment / 4 passenger-capacity
- j) **Radio communication system:** CB and/or cellular phone (if network available).
- k) **Waste disposal oven:** Household waste incineration oven for village micro-communities with no regular pick-up / manufactured locally / under supervision of National coordination team.

Annex V: Terms of reference

Project Manager:

Director of Observation, Studies and Coordination, he/she:

- ◆ is responsible for the management, the implementation and the finances of the project;
- ◆ coordinates the elaboration of the yearly work programme, based on the proposals of the members of the Steering Committee;
- ◆ reviews the financial reports on expenses managed by the Local Coordinator;
- ◆ issues the calls for bids for project studies and activities;
- ◆ transmits the documents and reports requested by the donors as provided in the project document;
- ◆ hires Consultants or contracts with Consulting firms for studies and work through the SEGMA/DOEC;
- ◆ transmits the yearly work programme, as approved by the Steering Committee, to the Regional Facilitator.

National Coordinator:

A Moroccan national with at least 5 years' experience in the field of natural area management, space planning and contact with local communities and the local population.

Good knowledge of computer science. Knowledge of Arabic, French and if possible English.

Experience in team leadership.

The National Coordinator appointed by the Project Manager :

- ◆ carries out the missions entrusted to him/her by the Project Manager on his/her behalf;
- ◆ ensures the operational implementation of the project;
- ◆ ensures coordination between the various project actors at the national and local levels;
- ◆ performs the secretarial, administrative and accounting monitoring tasks of the project;
- ◆ supervises the Local Coordinators in order to help them implement project activities;
- ◆ ensures actual implementation of field activities;
- ◆ will be called upon to head the future Coastal Area Unit.

Associated Experts:

(Made available by the various technical Departments: hydrologist, geologist, development architect, landscape architect, legal expert on land issues, forester, rural engineer).

Engineers or higher education graduates, of Moroccan nationality, with 10 years' experience in their areas of specialization.

They provide support to the project in their respective fields within short-term missions, through:

- ◆ Technical and scientific assistance at the request of the National Coordinator an/or the Local Coordinator;
- ◆ Linkages with the international experts;
- ◆ Definition of monitoring procedures (quantitative surveys, evaluation, parameters, indicators, etc.);
- ◆ Scientific linkages with the Regional Facilitator and the scientists of other project countries;
- ◆ Scientific linkages with national and regional research institutions;
- ◆ Joint drafting of an annual report on the changes occurring in the environment, under the direction of the National Coordinator.

Local Coordinator:

Regional Director of Water and Forestry of the Oriental (Oujda), he/she:

- ◆ Ensures the implementation and monitoring of project activities in the provinces of Nador and Berkane, in conformity with the yearly programme adopted by the Project Steering Committee. In this capacity, he/she is responsible for the activity of both Local Operational Units.
- ◆ Ensures secretarial support, and administrative and accounting control of the project at the local level.
- ◆ Manages the decentralized funds allotted to the project after the programme has been approved by the

Steering Committee. For this purpose, he/she will open an account where the funds advanced in conformity with donors' accounting procedures will be deposited;

- He/she manages the funds allocated by the Project Manager in conformity with donors' accounting procedures;
- He/she submits quarterly financial reports to the Project Manager/National Coordinator in March, June, September and December, with the original accounting documents (estimates, purchase orders, work acceptance documents, delivery, etc.) in annex.
- ◆ Contributes with the Project Manager/National Coordinator to the preparation of the terms of reference for the studies and work in concertation with the appropriate technical departments, the local operational units and project management;
- ◆ Organizes the calls for bids for the studies and work, subject to prior agreement of the Project Manager/National Coordinator (SEGMA department of the DOEC/ME). He/she participates in the evaluation and selection of the successful bidders, together with the Commission in charge of the opening of bids established by the National Coordinator.

Engineer in charge of the Local Operational Unit:

Advanced degree in biology, natural and environmental science, agriculture and forestry. Moroccan nationality. Experience in the field of natural area management. Good knowledge of computer science. Knowledge of Arabic, French and, if possible, English. Technical skills and ability to lead an operational team.

Under the responsibility of the Local Coordinator and in charge of a site, they ensure:

- The operational implementation of the project at the provincial level on the sites and complexes of sites selected;
- The animation and secretariat of each of the *Local Management Technical Councils*;
- The linkages with the socioeconomic actors and the local population groups.

Each engineer recruits, animates, organizes and controls a *Local Operational Unit* established within the Water and Forestry districts of Nador and Berkane.

They will have under their command: 2 senior technicians, and the required rangers/wardens and labourers (Moroccan nationals with appropriate training).

They will be responsible for establishing the work schedule of the 11 rangers/wardens, the 5 labourers and the Game Warden, according to the programme of work to be carried out on each site.

- **Subcontractors:**

The experts, consultants, business entities, associations or any other actor subcontracted to carry out a project activity will be required to provide their reports in six copies plus one unbound original copy and an electronic file on disk (PC Word/IBM compatible). These reports will be transmitted to the National Coordinator and the Regional Facilitator.

Terms of reference for the elaboration of the legal and regulatory framework

Legal experts specializing in the administrative, environmental and real property fields, that are knowledgeable in public law, with practical knowledge of the adoption process of new laws and regulations, particularly in the area of real property and public land law in all its aspects, including fiscal, also specializing in the areas of public/private easements and contract law.

They are to provide legal assistance aimed at developing a coherent legal and regulatory framework using in particular land policies to allow, in addition to the regulations in effect or to be established (urbanism, law on coastal areas, etc.), the acquisition, the protection and the sustainable management of the use of public or private lands required

for the protection and the preservation of ecosystem biodiversity in the coastal areas and wetlands. This activity will require the input of international expertise common to several countries to complement national capacities.

They will be required to:

- Research, review and analyse the existing legislation pertaining to the development and environment of coastal areas (land tenure, property rights and uses, protection of nature and areas, water resources, urbanism and land-planning, coastal areas, tourism, etc.).
- Propose measures for addressing the gaps in the existing legal and regulatory framework linking long-term biodiversity protection to sustainable development in sensitive sites.
- Provide assistance for the interministerial drafting of legal and regulatory texts, in cooperation with national legal experts and in collaboration with the various ministries and authorities concerned.

Terms of reference for Technical Assistance for the creation of a *Coastal Area Unit*

These consultants are to provide assistance for the expansion or creation of a *Coastal Area Unit* within the Ministry of Environment at ONEM. Efforts must be made to ensure the institutional and operational development of this entity and to allow it to adopt and adapt the most appropriate instruments to evaluate, monitor, control, foresee and plan the integrated development of the Moroccan coastal areas.

- The consultant will provide assistance to the Coastal Area Unit, with the specific mission of developing an operational methodology for the Unit; he will then provide support, through a programme of annual visits, to establish and develop relations between the project's local and national levels. He will call upon an expert in coastal area integrated management to reinforce this approach as applied to the Mediterranean coast of Morocco.
- The expert in coastal area management will provide technical assistance aimed at creating a Coastal Area Unit within the Ministry of Environment at ONEM.
- The Coastal Area Unit will eventually be the extension of the national project coordination structure. It will need to provide the means to better assess, monitor, control, foresee and plan the integrated development of the Moroccan coastal areas.
- A MedWet expert will conduct a 2-week training session to familiarize the Coastal Area Unit with the operation and use of the MedWet database. A local consultant will be needed for initial data gathering.

Terms of reference for the elaboration of the National Strategy for Wetland Conservation:

Wetlands specialist, with engineering or university degree and over 5 years' practical experience in wetlands preservation and/or management.

Legal consultant, with training in public law, having contributed to the establishment of a legal and regulatory system for wetlands or for the protection of sensitive areas in a riparian Mediterranean country.

They will be required to:

- Review the existing policies and legislation regarding the protection and development of wetlands and water management and analyze their impact on the country's wetlands.
- Identify the factors leading to the loss or degradation of the country's wetlands.
- With assistance from the national coordination team, conduct a national seminar to discuss a possible strategy for wetlands. This seminar will involve the line ministries and technical services concerned by the issues of

water management and use and will endeavour to balance the preservation of wetlands with a rational use of water resources.

It will be followed by the dissemination of the contents of the discussions on the "national strategy for wetlands" through the production and publication of information monographs and of the text of the National Strategy of Morocco for Wetlands.

Define, elaborate and propose a legislative and regulatory framework providing the basis for a durable, efficient protection of wetlands with significant biodiversity. This framework will comprize a formal "National strategy for wetlands", emphasizing the need to take into consideration the specific features of these special areas in development projects and the corrective measures to be applied in order to mitigate their degradation..

These activities will require the input of international expertise, if possible common to several countries, to complement national capacities.

Terms of reference for the Site Diagnostic Studies:

The site diagnostic study is an important phase in the process of establishing a site management plan.

It is aimed at four major objectives:

1. **Determine the distribution of the threatened species, the number of individuals and the important areas for each threatened group or species.**
2. **Identify and measure the threats on the various species and their habitats (e.g. visitors on the beaches).**
3. **Select a method for the monitoring of key parameters with impacts on the species and for the species themselves.**
4. **Constitute a group of scientists/naturalists who will be able to provide advice to the site managers on a regular basis in their areas of expertise (Water and Forestry).**

It is important to establish a group of national and international experts, in parallel to the associated experts, for each of the disciplines, creating or strengthening linkages between university researchers, and international NGOs (e.g. PlantLife, BirdLife, Royal Society for Protection of Birds, Ligue pour la protection des oiseaux, etc.). It is a well-known fact that the knowledge of nature is always commensurate with the importance of the observation activities: time spent in the field translates to an increase and improvement of knowledge.

Practical training sessions for students are to be encouraged, as are visits from naturalists. This will be a good way of mobilizing international expertise, sometimes on a pro bono basis, if one is able to provide lodging and transportation, within joint missions with national experts.

It is important, prior to the field studies, to establish a standard base map which is compatible with the GIS (or perhaps several maps with different scales depending on the site), which will serve to record the collected data.

	Activities
Regional Facilitator	Provide a model baseline document for all countries; This document will be presented at the "induction" meeting;
Diagnostic Coordinator (international)	Coordinate the activities of the team; Compile the final report; Establish scales of base maps; Make zoning proposals; Provide liaison with the various studies (land registry, legal, hydrology, etc.); Work in close concertation with the local coordinator;
2 botanists (at least one Moroccan national)	Establish the distribution of threatened flora; Make map of main vegetation communities (aerial photography); Research other valuable species; Identify three zones of interest (high, medium, low) for the flora; Define a monitoring system for threatened flora; Identify the factors influencing the species;
2 herpetologists (at least one Moroccan national)	Establish the distribution of reptiles and amphibians; Define a monitoring system for threatened reptiles; Identify the factors influencing the species; Identify three zones of interest (high, medium, low) for reptiles and amphibians;
2 ornithologists (at least one Moroccan national)	Establish count and distribution of threatened birds; Define a monitoring system for threatened birds; Identify the factors influencing the species; Identify three zones of interest (high, medium, low) for birds;
Mammologist (Moroccan national)	Establish count and distribution of threatened mammals; Define a monitoring system for threatened mammals; Identify the factors influencing the species; Identify three zones of interest (high, medium, low) for mammals,
Socio-economist (Moroccan national)	His mission will be defined in relation to the Diagnostic Coordinator, the Local Coordinator and the Regional Facilitator
Research team for analysis of parameters regarding water quality and quantity	- Collection of existing data on hydrological parameters (rainfall, evaporation, heights and flows, water table levels, water quality, levels in dam impoundments, etc.), on the existing water projects and the use of the water resources from sensitive sites' watersheds. . The sources of pollution impacting the sites and their habitats will be identified. - Field work to provide more complete data on water quality, sediments and pollutants where present (content of heavy metals, nitrates, nitrogen, phosphates, water table level, bathymetry, etc.). This diagnostic study will focus more particularly on water flow in the lagoons.
Team in charge of technical analysis and implementation of provisional water management schemes, undertaking urgent water management actions.	Elaboration and implementation of provisional water management schemes. This plan will focus particularly on future improvements of the irrigation network in areas with ground-water overdrafts by establishing controls on water levels and quality, encouraging the farmers to use localized irrigation and planning to provide them with training in water management and water-saving techniques. This activity will also serve to provide a list of indicators to be measured during the initial survey, then monitored throughout the duration of the project.

The scientific team assembled around the Diagnostic Coordinator during the diagnostic study will need to remain in contact with project members during the implementation phase in order to contribute to other studies and monitoring activities and to provide advice on the measures to be implemented.

Terms of reference for the Management plans:

Under unified leadership (a highly desirable option would be to have the Diagnostic Coordinator assume leadership for the elaboration of the management plan), the person or persons in charge of this activity will need to have the skills required to and experience of actually establishing a technically, scientifically and financially successful development and management plan for sensitive coastal areas, with international actors in one of the Mediterranean riparian countries.

They will be required to:

- Elaborate an integrated management plan for each pilot site or site complex. These plans will define the modalities for the management of land and biological resources and for land-use (leisure activity planning, hunting, fishing, regulation of pastoral activities, overgrazing, etc.). They will establish the tasks to be undertaken and the work programme, as well as the budget allocations required for the rehabilitation and development of the sites with a view to realizing the project's objective, i.e. the preservation of wetland and coastal ecosystems.
- The management plan will define the actions and orientations over a period of 5 years.
- Each management plan will take into consideration the inventories, descriptions, findings and recommendations of the initial diagnostic studies, as well as those of the schemes pertaining to urban development and waste management. Each document will describe the programmes and actions to be implemented in order to obtain clear and measurable results, situating those programmes and actions within the national and regional contexts.
- Assist the Local Coordinator and the Local Operational Units to help them prepare yearly management programmes based on the five-year management plan. The yearly management programmes are aimed at facilitating the management of each site by anticipating the actions and budget needs for the year ahead, taking into account the natural and ecological variables. For this purpose, the plans and budgets will need to be flexible enough to provide for contingencies.

Terms of reference for the definition of an ecological monitoring programme

The task to be completed is the following:

Develop, in close cooperation with the appropriate technical or scientific departments, for all of the sites a programme to monitor both the sites and their peripheral areas, meeting the following requirements:

- Strict application of the MedWet/BIROE monitoring methodology,
- Ability to meet the monitoring needs of the site managers and departments involved,
- Ease of use by the managers, without constant necessity to call upon outside laboratories.

The first phase will consist in conducting an objective review of the monitoring programmes currently in effect or projected for the area (entity, location, responsible parties, monitoring objectives, methodology, results).

The second phase will consist in formulating a monitoring programme in strict conformity with the MedWet/BIROE methodology, applying the following logical steps:

1. Identify the problem/issue
2. Set the objective
3. Establish the hypothesis
4. Select methods and variables
5. Assess feasibility and cost-effectiveness
6. Conduct a pilot study

7. Collect samples
8. Analyze samples
9. Produce report on results
10. Apply management measures and evaluate the project.

Based on the assessed demand and needs at the local level, assistance will need to be provided to the manager or department concerned in order to implement the priority monitoring mechanisms. The monitoring programme will have to be realistic, suited to the capacities of the departments available to implement the programme and to the decision-making process aimed at regulating uses.

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