# UNITED NATIONS DEVELOPMENT PROGRAMME GLOBAL ENVIRONMENTAL FACILITY

#### Project of the Government of Algeria

#### **Project Document**

Project Number: ALG/00/G55/A/TG/99	Project Number:	ALG/00/G35/A/1G/99
------------------------------------	-----------------	--------------------

Project Title: Biodiversity Conservation and Sustainable Natural Resource

Management

Estimated starting date: December 2001 Estimated end date: December 2004

Management Arrangement: NEX Execution and overall supervisory role by MoA with NGO

implementation

Designated Institutions: Department of Nature Conservation and the NGOs Network in Algeria Project Site: Taghit-wilaya of Béchar, Mergueb-wilaya of M'sila, and Oglat Ed Daïra-

wilaya of Naâma)

Beneficiary Country: Algeria

#### Classification Information

ACC sector and sub-sector: 0430 Biological Resources

DCAS sector and sub-sector: medicinal plants, Research and Development (0527)

Primary areas of focus/sub-focus: promoting biodiversity and sustainable use of natural resources (03)

Secondary areas of focus/sub-focus: Improvement of data and information on sustainable development (0317)

Primary target beneficiaries: Local Communities and NGOs

(06)

Secondary target beneficiaries: Local Governmental

Organizations (0539)

## Summary of GEF-UNDP and Co-financing inputs (USD)

GEF 725,000

GoA (in-kind) 1005,000

NGO-Network and Local

Communities (in-kind) 210,000

Total 1940,000<sup>1</sup>

LPAC Review Date: 11 december 2001 Programme Officer: Ms. Djahida Boukhalfa

Brief Description: The project aims to conserve and sustainably use globally significant biodiversity and to fight against land degradation in three priority areas in the arid and semi-arid zone ecosystems of Algeria. The main outcomes of the project will be 1) development of integrated management plans for the three protected areas, 2) legalization of protection measures for the three sites, 3) promotion of environmentally conscious local populations, 4) capacity building of relevant NGOs and local institutional entities, and 5) development of alternative socio-economic programs for local communities to promote sustainable use of biodiversity and the natural resource base. The project is in line with the national priority objectives set by the Government of Algeria in the National Biodiversity Strategy and Action Plan. It will be implemented on site by a representative network of Algerian NGOs to be selected for this purpose in coordination with the Ministry of Agriculture, Nature Conservation Department, which also will play an overall coordination and backstopping role.

On behalf of	Signature	Date	Name/Title
Government			
General Directorate of Fo	prests		
UNDP			

United Nations official exchange rate at date of last signature of project document: \$1.00 =

Excluding US\$25,000 provided by the GEF as PDF-A resources.

#### TABLE OF CONTENTS

Α.	CONTEXT	3
A.1	Background	
A.2		nd non-government development activities/objectives in the target areas
A.3		ion and site issues
A.4	Target Benefic	ciaries
A.5	Stakeholder Id	entification
A.6	Previous expe	riences and ongoing activities by national and international partners
A.7.	National Reso	urces1
В.	STRATEGY	FOR USE OF UNDP RESOURCES10
B.1.	Project relation	n to UNDP/GEF Mandate1
B.2.		Problem Addressed through UNDP/GEF Intervention1
С.	IMMEDIATI	E OBJECTIVES, EXPECTED OUTCOMES, OUTPUTS AND
	ACTIVITIES	12
D.	INPUTS	16
<b>E.</b>	RISKS AND	PRIOR OBLIGATIONS17
F.	MANAGEMI	ENT17
F.1.	Implementatio	n Arrangements17
G.	MONITORIN	NG AND EVALUATION18
Н.	LEGAL CON	TTEXT1919
I.	WORK PLAN	N FOR THE PROPOSED ACTIVITIES20
J	BUDGETS	21
K.	<b>ANNEXES</b>	
	Annex 1.	List of acronyms and abbreviation
	Annex 2.	Summary of outputs and activities with their measurable
		performance indicators
	Annex 3.	Incremental Cost Assessment
	Annex 4:	Demonstration of project activities per sites with reference to responsible parties
	ANNEX 5.	List of NGOs Network involved
	ANNEX 6	Indicative list of globally significant plant and animal species
	ANNEX 7	Project Planning Matrix
	ANNEX 8	Project Organization Chart
	Annex 9. Annex 10	Table of threats and causes to biodiversity and proposed project activities ToRs for Steering Committees and Project Staff

#### **CONTEXT**

#### A1. Background

Algeria is the tenth largest country in the world and the second largest in Africa. It extends over an area beyond 240 million hectares in northern Africa, of which 90% occurs in the sub-Saharan arid zones with slightly less than 150mm rainfall per annum. With coastline of 1200 km, its twin Atlas mountain chains with peaks between 100-200m separating the northern areas from the rest of the country, its arid and semi arid high plateaus with immense Salinas and Saharan plains, Algeria offers a rich mosaic of ecosystems and biodiversity. Such biodiversity inter-alia is attributed to the wide climate variations ranging from 1,000mm annual rainfall in the north to less than 5 mm in the extreme south. The Algerian territory is divided from north to south into the following zones: Coastal, mountains, arid and semi-arid, and sub-Saharan zone.

The arid and semiarid region consist of the steppe areas extending over an area of 50 million hectares, almost one forth of the total national territory. These areas provide sustenance for herd and sheep (estimated at over 12 million heads) and a human population of nearly 7 millions. Due to many several human related pressures, these marginal areas are heavily affected by land degradation, biodiversity loss and desertification. An important reforestation program using *Pinus halepensis* known as the green barrier was implemented in the 1970 in order to halt the expansion of the desert. Its basic design was altered after a decade to become an integrated agro-sylvo-pastoral development project.

In terms of nature conservation and protected area management, and despite various institutional, socio-economic, political and development pressures, Algeria has remained among the few countries in the region that assumed recognition for their international and local level actions and support of biodiversity conservation. At the international level, Algeria has entered a number of co-operative agreements and legal obligations affirming its responsibilities for conserving biodiversity, including the World Heritage Convention in 1974, the Ramsar Convention in 1983, the UNESCO Man and the Biosphere Programme in 1991 and the CBD in 1995. The first Algerian forestry code and conservation legislation came into existence in 1912 and on this basis a series of national parks was set up by the French administrative authorities. Following independence, a legislative framework for biodiversity conservation was established in 1983 as part of the National Strategy for the Conservation of Fauna. Under Law No. 83-05 on the Protection of the environment enabling the designation of protected areas, a total of eleven national parks/nature reserves covering approximately an overall area of 600,000 km<sup>2</sup> have been declared. At the national level and in order to fulfill the provisions of the CBD, Algeria undertook series of biodiversity assessment reports culminating previous actions and activities as well biodiversity knowledge. An Algerian Biodiversity Strategy and Action Plan was developed in 2000 with UNDP/GEF assistance and with the aim to provide an integrated framework for biodiversity conservation and sustainable use based on wide stakeholder consultations. Algeria has so far implemented no transnational biodiversity conservation initiatives, except for some preliminary investigations in the 1990s focusing on El Kala National Park and adjacent areas in Tunisia.

Some of the national priority areas for conservation that have so far been subjected to significant threats of unrestricted grazing, habitat degradation and disturbance from human activities are the reserves of Taghit (wilaya of Béchar), Mergueb (wilaya of M'sila), and Oglat Ed Daïra (wilaya of Naâma). These areas are located in the arid and semi-arid zones, which are widely represented in Algeria (3/4th of the national territory). In this vast territory, a distinction must be made between the steppe zones and the Saharan areas. The steppe zones cover a total area of 200,000 km², with rainfall ranging from 100 to 500 mm/year and a dry season of 6 to 9 months. The Saharan regions are characterized by a total rainfall of less than 100 mm/year and year-round drought. In these harsh environments, a broad diversity of globally significant ecosystems has developed; these ecosystems are characterized by flora and fauna with numerous endemic and threatened species justifying the decision to establish the project. National conservation/management programs unfortunately have not so far adequately addressed several management issues in these particular areas, primarily due to in adequate capacity and weak responsibility sharing among stakeholders.

The natural habitats in these regions have traditionally been used by nomadic populations, practicing extensive livestock grazing (sheep, goats and camels). The destabilization of traditional societies caused by the colonial development system, the post-independence development system and population

growth resulted in land use practices that disrupted the ecological balances. The climatic desiccation trend observed over the past 30 years further increased and accelerated this disruption. Human pressures combined with climatic factors to produce a phenomenon consisting of a degradation of ecosystems leading to the extinction of remarkable species (ostrich, antelopes, the Atlas lion and the panther). Other species such as the Atlas pistachio tree, acacias, gazelles (*Gazella dorcas, G. cuvieri, G. leptoceros, G. dama*), the audad (*Ammotragus lervia*), the cheetah (*Acinomyx jubatus*), are included on the IUCN Red List and becoming very rare in these areas.

The three sites have been accorded national priority under the framework of the Biodiversity Strategy Action Plan giving due consideration to the conservation and sustainable use of biodiversity. These sites are of global significance in that they harbor a high plant and animal diversity. In terms of wildlife, the Taghit reserve for instance harbors four locally threatened species (*Felis margarita Caracal caracal Lutra lutra* and *Poecilictis libyca*), three regionally threatened species (*Varanus griseus Histrix cristata* and *Ammotragus lervia*), and five globally threatened species (*Agama savignii Atlantoxerus getulus Gazella leptoceros Gazella dorcas* and *Acinomyx jubatus*) (see Annex 6 for further details). The mountain gazelle endemic to the Maghreb and the striped hyena the rare species are present in the Mergueb reserve, and are on the IUCN Red List for globally endangered species. The Naâma reserve has over 24 global significant plant and animal species, some of which are extremely endangered due to intensified anthropogenic pressures.

# A.2 Government and non-government development activities/objectives in the target areas

The nature of rapid development patterns that took place in the 1970s and 1980s mainly in the form of agriculture, urban and infrastructure development and the will of the GoA to industrialise inflicted serious environmental damage on the native fragile environment. At the end of the 1970's, the first consequences of the impact of development on environment was apparent and the Algerian Government had to respond by taking series of steps aimed at protecting environment and natural areas, while at the same time supporting sustainable human development. The Government commitment to sustainable natural resource management was evident from the programmes launched on environmental education, sustainable development, renewable energy technologies, poverty alleviation and in specific its programme for sustainable development of the Saharan regions. The latest is over \$2.5million government-funded project that covers to large extent oases rehabilitation and small food production farms in the west and south Algeria Sahara.

In the 1980s and early 1990s, the GoA embarked on developing special administrative or technical departments in charge of environmental protection and natural resources management. Among these are: a) the Secretariat of State for Environment within the Ministry of Interior, Local Communities and Environment; b) General Directorate of Forestry and Forest Conservation Offices at the wilaya levels; c) National Agency for Nature Conservation (ANN); d) High Commissariat for Steppe Development (HCDS); e) Commissariat for the Development of Agriculture in Saharan Regions (CDARS); and f) The creation of National Environmental Trust Fund (50 millions Algerian Dinars) in the early 1990's to support environmental protection. The General Directorate of Forestry (DGF) will be the national counterpart and government focal point to this project.

On the national upstream, setting up the national polices, legal and regulatory measures: a) the National Environmental Policy-1980s; b) the Environment Act; c) the Forestry Code; d) the Water Resources Code; e) the Game Act; f) the Law for the protection of threatened animal and plant species; g) the law regulating hunting; h) the Framework Law on Land Tenure; i) Standard Statute for the creation of Nature Reserves and National Park; and the ratification of regional and international conventions related to biodiversity such as the African Convention on the Conservation of Nature and Natural Resources, the CBD, the CCD, etc.

In addition, the Government initiated a consultation framework with civil society participation including the support to the NGO community in the areas of environment and natural resources (Law of December 1990 on Associations), and the establishment of the Higher Council for Environment and Sustainable Development (HCEDD). The HCEDD is placed under the chairmanship of the Prime Minister. Its membership comprises six prominent members of civil society, among whom NGO executives, together with representatives of the Government, are within the technical committees. In addition, numerous

wilayas and municipalities have set up environment and sustainable development councils with representation from the traditional authorities and local associations.

And also the support by the Government to sub-regional decentralised institutions such as the regional departments of environment, forest conservancies, regional communication centres (printed press, radio and TV), and the NGO community dealing with environment, forest, combating desertification and ecosystem monitoring. Among the most promising efforts is the establishment of an observatory for long-term biodiversity monitoring in the Algerian Sahara with approximate government funds of \$170,000.

The annual support by the Government to the three reserves can also be considered part of the government sustainable development baseline. At present, these are estimated at \$350,000, most of which are to be used to cover local administration costs such as staff, rangers, some equipment, and various operations.

#### **NGO** activities:

The NGO movement in the areas of environment and natural resources is a recent development in Algeria According to the UNDP 1998 assessment, the number of registered NGOs in Algeria is approximately 250, and vary widely in terms of their capacities for action.

The CNOA/RIOD is an infomal network group of NGOs that is most active in the field of environment in Algeria. It was created in October 1996 comprising 26 member associations, six of which are acting as relays in the different regions of the country. The national focal point for this network is the AREA-ED NGO, which also act as the sub-regional focal point for North Africa.

The netwok activities during the last four years included the organization of national, sub-regional and international meetings dealing with biodiversity conservation and combating desertification. The last one was held in Algeria and supported by UNSO (the Office to Combat Desertification in UNDP), and enabled the network to come out with a strategy for implementing the CCD in the sub-region.

With resources from Comite Catholique contre la Faim et pour le Developpement and the Government of Canada, this NGOs network had recently led a local initiative that is devoted to water management practices in the Algerian desert. It also has participated through the sub-regional project on sustainable development in the Maghreb. In addition, the network with European support through the LIFE Program is supervising a project dealing with the rehabilitation of marine ecosystems in the northern part of the country.

Despite the work indicated above, in the current situation the capacity of these NGOs and the activities undertaken are likely to remain embryonic if additional support is not provided to allow effective biodiversity conservation and sustainable nature reserve management and use.

During the national workshop held in September 1997, where a questionnaire was distributed to the associations, important needs were expressed regarding: access to broad and updated documentation, exchange and access to information, training in participatory approach methods, project elaboration, data gathering and data base management, and acquisition of awareness-raising and didactic materials adapted to the local context. All of these activities directly or indirectly concern the NGOs Network capacity to assist in overall management of natural reserves in the long term. In addition, in September 1998 during the national workshop (wilaya of Béchar) that was attended by senior governmental and non governmental officials, community based organizations, the NGO community, local community leaders and sheikhs and senior diplomats based in Algeria, the project was communicated with all stakeholders, co-funding resources were finalized and the NGOs taking productive role in protected areas management was concluded.

This project is aimed at mitigating human pressures on the ecosystems by proposing activities to benefit local populations and to involve them in the management of protected areas. The NGO Network will play an active role in the implementation of the project, which will be carried out over a period of three years.

#### A3. Current Situation and site issues

**Mergueb:** The site of Mergueb (RNM - Réserve naturelle de Mergueb), recognized as an ecologically important area since the 1980's, is located in the wilaya of M'Sila, covering an area of 16 481,42 hectares. It is situated in the high plains, 160 km south of Algiers. The climate in this region is characterized by a yearly average temperature of 17 °C, annual rainfall of approximately 200 mm and a dry season lasting from 7 to 8 months (May to December). According to the Le Houerou classification (1989), the Nature Reserve of Mergueb is characterized by a moderately arid climate with cool winters.

The Nature Reserve of Mergueb is noteworthy for the variety and quality of its steppe ecosystems, with the following plant species widely represented: esparto grass (*Stipa tenacissima*), Salsola (*Salsola vermiculata*) and pastoral mugwort (*Artemisia campestris*), and in the "dayas" (depressions), pistachio tree and jujube tree (*Pistacia atlantica* and *Zizyphus lotus*). However, Mergueb owes its status as a nature reserve mainly to its rich fauna (see Annex 4), with the presence of the Cuvier or mountain gazelle (*Gazella cuvieri*) conferring its international significance. This gazelle, which is endemic to the Maghreb, is threatened over all its distribution area. It is included on the IUCN Red List and has been protected by Algerian legislation since 1983. Its total world population is estimated at 400 individuals (Sellami & Al., 1990), forty of which are present in the Mergueb reserve.

Other animal species are also present in the reserve, including among the most noteworthy: the Algerian hedgehog, the desert hedgehog, the lynx and the striped hyena. A large number of birds have been reported in Mergueb, 83 species of which (over 50%) are migratory species.

The main threat to biodiversity conservation in the Mergueb area include the abusive and unsustainable use of biological and natural resources in the form of overgrazing around the reserve leading to loss in rangeland biodiversity, and also to land degradation. The cause for this threat stems from the open and unmanaged access into the reserve by shepherds, with goat and sheep. The root cause for this threat is related to the weakness in traditional grazing systems being used in the area.

The project will work in complementary with the government rangeland policy and rehabilitation programs promoting extensive pastoral production in steppe and degraded zones (Mergueb and other sites) to combat desertification and to regenerate pastoral cover for animal grazing. In many cases, these government programs would need to adopt proper incentives to influence traditional tribal systems to revitalize biodiversity friendly transhumance and extensive rangeland production.

The project will be formulating the plan to officially declare the site as natural reserve and formulating a management plan, which will identify innovative activities and proper incentives to be adopted by the Government of Algeria to promote the rational use and conservation of biodiversity, including rangeland biodiversity. The project with the local stakeholders will gear activities in Mergueb reserve directed at combating desertification and rehabilitation of degraded rangelands using native forage seeds to enrich native flora. It also will undertake an animal-fattening scheme demonstrating a pastoral production system in buffer areas where no global significant biodiversity is present to provide animals with supplementary feeding thereby reducing number of animals and herds in the reserve while at the same time providing enhanced local economic benefits. In addition, the project will rehabilitate few watering wells and facilities found within the reserve to provide water for wildlife species and migratory animals.

**Oglat Ed Daïra:** This site is located within the municipality of Ain Ben Khelil (wilaya of Naâma), in the steppe zone, a region with very diverse ecosystems: on the plateaux are steppes with esparto grass (*Stipa tenacissima*), white mugwort (*Artemisia herba alba*), milkweed (*Lygeum spartum*); in the salty areas, formations with salsola (*Salsola vermiculata*) and atriplex (*Atriplex halimus*); in the humid zones, formations with tamarisk (*Tamarix sp.*); in the depressions, formations with Atlas pistachio trees (*Pistacia atlantica*), and at higher altitudes on the slopes and at the top of Djebel Aïssa, relic forests of Aleppo pine (*Pinus halepensis*), Phenician juniper, (*Juniperus phoenicea*), cade (*J. oxycedrus*), and green oak (*Quercus ilex var. ballota*). The specific rate of endemism in this area may reach 10% of the flora, and this is considerably significant by dryland standards.

The Oglat Ed Daira site, with its wide variety of natural landscapes and its permanent lake offers a sample of steppe ecosystems whose global interest was underscored by Grenot (1992). The site covers an area of 2,000 hectares including the lake (400 hectares) and sand dunes with local species over

1,050 hectares. The remainder is occupied by natural formations with Artemesia, esparto grass and milkweed, and small farms. The number of wild plant species reported in this area is 79 of which 9 are endemic species.

The fauna present in these environments reflects the diversity of the ecological niches. Among the global significant wildlife species reported in the region, particularly noteworthy are the Cuvier gazelle (rare species), the audad (regionally threatened species), the desert hedgehog, the porcupine and the lynx, which are declining (see annex 4).

The lake holds great interest for the wildlife and in particular for the sedentary and migratory bird fauna of global importance which frequents it regularly: pink flamingo (*Phoenicopterus rubber roseus*), gray heron (*Ardea cinerea*), mallard (*Anas platyrhynchos*), pintail (*Anas acuta*), glossy ibis (*Plegadis falcinellus*), northern shoveler (*Anas clypeata*),purple gallinule (*Porphyrio porphyrio*), black-winged stilt (*Himantopus himantopus*), white stork (*Ciconia ciconia*), woodcock (*Scolopax rusticola*) (, etc. (*Grenot*,1992).

The site of Oglat Ed-Daïra, though receiving operational support from the Government of Algeria is not yet legally established, which implies that protection measures on the site have not materialized to meet conservation and management needs, and that current management efforts might not be fully enforced by the reserve team.

In view of its landscape and important biodiversity (flora and fauna), Oglat Ed-Daïra reserve has been an attractive tourist destination frequently visited by local and national tourists (approximately 5,000 tourists/year). Outings and excursions by tourists are not fully utilized by the reserve management teams to benefit the reserve and the surrounding local communities. On the contrary, this is causing an additional burden on the reserve ecosystem causing biodiversity erosion in a small area. Unfortunately, due to the recession that hit the tourism sector in Algeria during the 1999s, the Government though still interested had done little to sustain tourism potential on the site.

The project will adopt incremental activities promoting sustainable forms of eco-tourism through awareness raising, local participation, introducing gate fees, and transferring knowledge in traditional craft production to benefit local communities. It also will put into place the legal foundation for the establishment of the reserve to lay the ground for long term and sustainable management of biological and natural resources.

**Taghit:** The Taghit region is characterized by its arid climate (50 mm annual rainfall). It is located at the western edge of the Great Occidental Erg. It is a Saharan region belonging to the north-western Sahara complex, with high potential for endemic biodiversity. It has been settled by human populations for a very long time, and possesses a wealth of popular knowledge in the areas of biodiversity and traditional pastoral and agricultural practices. The population numbers approximately 8,000 people, of which 2,000 are nomadic and 6,000 sedentary, most of the latter established in the Taghit oasis. With its natural landscapes and its cultural and archeological treasures, the Taghit region has strong potential for tourism.

The most widely represented ecosystems are steppes with panic-grass (*Panicum turgidum*), desert steppes with drinn (*Aristida pungens*), desert steppes with acacia trees and panic-grass (*Acacia raddiana* and *Panicum turgidum*), and salty zone formations with tamarisk (*Tamarix sp.*). These ecosystems contain remarkable flora and fauna in view of their very high specific endemism rate (around 25%) (M. Le Berre, 1990) and (P.Ozenda, 1983; Quezel, 1965).

Several animal species peculiar to Saharan regions have been reported in the Taghit area. Some of them are of global importance: the dorcas and leptocere gazelles (*Gazella dorcas* and *G. leptoceros*) which are threatened and listed on the IUCN Red List, the Algerian hedgehog and the desert hedgehog (*Aethechinus algirus* et *Paraechinus aethiopicus ssp. deserti*), the Lybian zorille (*Poecilictis libyca*), and the Barbary ground squirrel (*Atlantoxerus getulus*). Other species of global significance have vanished recently: the cheetah (*Acinomyx jubatus*) has not been observed for over 20 years and the ostrich and larger antelopes were exterminated in the 1950s. The oases and natural watering stations are necessary staging areas for the migratory bird species of global significance.

Pollution by wastewater discharge is the main threat to biodiversity in the Taghit reserve. It results in harmful effects on the native biodiversity of the reserve leading to invasion by non endemic animal and plant species that have eventually replaced native and endemic biodiversity in the oasis community. In addition, severe economic losses have already affected the owners of the palm groves, who in return make up for their loss of income using the reserve natural resources. The agricultural zone of El Aouinat (Taghit) is also affected by a similar phenomenon where unsound agricultural practices caused a loss of soil fertility so that 30% of the farmers were forced to leave their farms and the cleared lands are now exposed to erosion. The recession that hit the international tourism sector had a consecutive impact on the local handicrafts, which can no longer be sold due to the lack of distribution channels.

Using non-GEF resources, the project will support the establishment of a wastewater treatment facility in the amount of US\$ 588,000, which will be situated in the palm grove of Taghit site. Although the agricultural zone of El-Aouinate is outside the core areas of the Taghit reserve, a management plan for the reserve will ensure that unsound agricultural practices are addressed through regular awareness raising and extension seminars and also through effective planning. The project will work in synergy with the government projects dealing with rehabilitation of oases, agricultural farms, and desertification combat in Taghit to promote land use planning ensuring that agriculture expansion takes place only on sustainable and biodiversity-friendly basis. In addition, the project will support traditional handicraft production, and capacity development of the nature education, tourism and awareness center in Taghit promoting awareness and sustainable eco-tourism.

#### A4. Target Beneficiaries

At a global level, the global community would benefit from conservation of globally significant biodiversity and from the sustainable use of its components, through recreational and indirect use values secured by removing threats to the ecological integrity of globally significant nature reserves.

At the national- local levels, the principal target beneficiaries will be local communities in the reserve areas, the NGO-Network, the local representatives of local municipal and wilaya sector, the government responsible agencies and concerned officials who work with nature conservation and protected area management. All these will benefit from the foreclosure of threats to an important natural heritage through a collaborative management mechanism linking conservation activities with the development of sustainable livelihoods.

The participatory aspect, which prevailed it self during project preparation phase will be maintained during the implementation phase and broadened to include all parties concerned. These participatory mechanisms are planned both in the project organizational structure and in the budget. During the implementation phase, on each site, local associations and indigenous populations will be continuously involved in the activities, in particular through the Local Support Committees. Particular attention is being given to women and youth.

In order to succeed, the project will need to promote constant consultation with the local and national public organizations. In addition, some activities will require partnerships with research institutions and public or private companies.

#### A5. Stakeholder Identification

The main stakeholders concerned with the project include:

At the local level: The popular municipal assemblies, the popular wilaya assemblies, the administrative authorities (daïras and wilayas), in particular through the sectoral directorates (Forestry Conservation, Directorate of Agricultural Services, Inspectorate of Environment, Directorate of Equipment for water-related issues), environmental, cultural and professional associations, as well as branches of organizations and national agencies for the protection of nature (Agency for Nature Protection, High Commissariat for Steppe Development, Commissariat for the Development of Agriculture in Saharan Regions), and university research centers and units.

During the PDF-A, local participation was limited to two national workshops. During the first workshop project ideas were discussed with local stakeholders and feedback was obtained between the

first and second national workshop. Sheikhs and community leaders in M'sila, Ain Ben Khalil and Taghit consulted with their communities including nomads on the social acceptability of the project ideas and their feedback was captured during the second national workshop and incorporated into project design.

At the national level: The Ministry of Foreign Affairs, (GEF National Focal Point and biodiversity convention focal point), the Ministry of the Interior, Local Communities and Environment, the Ministry of Agriculture, the General Directorate of Forestry (Convention to Combat Desertification focal point), the organizations for the protection of nature such as the National Agency for Nature Conservation, the High Commissariat for Steppe Development, and the Commissariat for the Development of Agriculture in Saharan Regions.

The NGOs listed in the annex will be the major actors in the project implementation process. The grassroots communities are the direct and indirect beneficiaries of the project and will be directly involved in the project whenever possible, in particular the vulnerable sub-groups of women and youth.

During the two national workshops held in September 1997, and September 1998, important needs were expressed regarding: building capacity of the NGOs, local and site level participation, access to broad and updated documentation, exchange and access to information, training in participatory approach methods, and acquisition of awareness-raising adapted to local context. The level of cofunding for the project and also the roles of the NGOs network in undertaking the implementation of the project was supported.

The stakeholders will be mobilized through the continuous consultation mechanism described above. Special mention must be made of the synergistic effects that will undoubtedly benefit the project as a result of the strengthening of the network, which will thus act as a major catalyst in the project implementation process.

Through the participating NGOs, the populations and grassroots communities will become involved, associated and even interested in the various activities underlying the project.

During project implementation, periodic meetings both at the local and national levels will enable the stakeholders to keep informed of the project progress. The PC, the National Steering Committee and the Local Support Committees will share the responsibility of relaying information to the partners.

In addition, the reinforced NGOs network will make a vital contribution as a vehicle for the dissemination of information on natural resources in arid and semi-arid zones, not only for the partners and network members but also for the general public.

Project results will be carefully reviewed in order to apply timely corrective measures, thus guaranteeing the durability of project impacts on the sites and the populations.

The socio-economic issues were recognized very early as determining factors for the success of the natural resources preservation process. These issues will therefore be the object of particular attention and will be taken into consideration within a specific activity.

The populations of arid and semi-arid zones continue to perceive their identity in ancestral practices regarding the management of natural resources. The intrusion of the modern world within these societies disturbs the fragile equilibrium, which existed between the human populations and the ecosystems. One of the objectives of the project, through its participatory management approach, will be to rehabilitate gradually disappearing beneficial practices.

#### A.6 Previous experiences and ongoing activities by national and international partners

Rapid preparatory analysis during the PDF-A had shed light on the level of baseline operations in the three reserves, which are modest as far as the support to biodiversity conservation, protected area management and sustainable development is concerned.

This GEF project has direct links with other GEF Initiatives and fits well in the context of UNDP's Country Co-operation Framework which includes biodiversity conservation as a key thematic focal area. Current UNDP/GEF initiatives for which complementarities would be optimized and strong communications maintained during implementation, include: 1) biodiversity enabling project leading to national Biodiversity Strategy and Action Plan for Algeria; 2) Hoggar and Tassili National Parks management project, 3) the regional project on participatory management of plant genetic resources in the oases of the Maghreb, and 4) the World Bank/GEF experiences in El-Kala National Park.

#### A.7 National Resources

The Government of Algeria's commitment to sustainable natural resources management is evident from its many programmes launched on environmental education, sustainable development, renewable energy technologies, poverty alleviation and in specific its programme for sustainable development of the Saharan regions. The latest is over \$ 2.5million government-funded project that covers to large extent oases rehabilitation and small food production farms in the west and south Algeria Sahara.

The Government of Algeria through the Ministry of Agriculture will be putting US\$350,000 annually for management of the three protected areas once legally established. It is intended that project activities do not apply to all sites, and will be limited only to those sites where threats are present. The MoA and the implementing NGO will replicate demonstrating activities financially for other sites. See Annex 2 for details on demonstration of project activities per sites.

The total cost of the project is estimated at US\$2,123,000 for 3 years. GEF contribution, including the PDF-A, is US\$750,000, which is 36% of the total. Government contribution is estimated at US\$1005,000, NGOs Network and the local contribution is US\$200,000. In total, the country contribution is about 57% share. Other co-financing accounts for US\$ 158,000, including US\$75,000 from IFAD, 50,000 from the French Embassy and US\$ 20,000 from Fonds Canadien des Initiatives Locales (FCIL).

The Wilaya of Béchar contributed to the funding for the final workshop (PDF complement) organized in Taghit (Wilaya of Béchar) from 29 September-1 October 1998. INCREMENTAL COST MATRIX

#### Section B Strategy for Use of UNDP resources

#### **B1.** Project Relation to UNDP/GEF Mandate

UNDP and the Government of Algeria had the interest and vision for developing this environment related project since 1996 and both parties have collaborated with local and national stakeholders to secure GEF MSP resources. The project goal is to conserve and sustainably use globally significant biodiversity and to fight against land degradation in three priority natural reserves in Algeria (Taghit, Mergueb and Oglat Ed Daïra). The project had two immediate objectives: promote biodiversity conservation and promote sustainable use of biodiversity and natural resource management in the buffer zone of the three reserves. The strategy is to implement this project in close cooperation with the populations concerned and the NGOs network. The GoA has formally welcomed this initiative.

The above objectives are strongly linked to the vision and mandate of UNDP. It builds on UNDP interest in poverty alleviation through its emphasis on income generation, sustainable use and sustainable livelihood options and alternatives. It also supports UNDP's efforts for good governance on natural and biological resources through the establishment of legal designation frameworks for the reserves Taghit, Mergueb and Oglat Ed Daïra. The project also is in full coherence with the objective relating to the gender issues by working closely with local communities, mainly women, in and around the three reserves.

Prior to securing GEF-UNDP resources, the three selected sites were screened from dozen proposals using a review matrix consisting of the following criteria and priorities: a) national priority, particularly mentioned in one or more of the country's reports including the BSAP; b) global significance including the relative high species diversity characterized by the presence of endemic and threatened species; c)

suitability for the development of a demonstration project, many features of which would be applicable to similar dry lands in Algeria and elsewhere in the region; d) the willingness of the people to participate in the project; and e) the capacities of the propounding organizations.

The three sites were to be established by the Government of Algeria during the mid 1980s as protected areas. Unfortunately, the efforts by the government, while appreciated are not sufficient to meet proper conservation and management needs. The staff members of the local forestry and nature conservation departments concerned by the management of the three sites as well as many concerned local actors have little training, capacity or experience in protected area management and biodiversity conservation. The activities proposed by this project would address the capacity of the local stakeholders in each site, including grassroots community associations, local communities, local authorities and the protected areas staff.

The above strategy to use GEF-UNDP resources was build on the fact that the Government of Algeria is eligible for UNDP-GEF funding based on its ratification of the Convention on Biological Diversity in August 1995. The project is given a national priority highlighted in the Country Assessments on Biological Diversity and the newly emerging Biodiversity Strategy and Action Plan.

The project it self responds to the guidance and objectives of the CBD dealing with biodiversity conservation and sustainable use as they also relate to land degradation. It also stems from the strategic considerations of the GEF Operational Program 1 on arid and semi arid zone ecosystems promoting biodiversity conservation and sustainable use primarily in countries in Africa and in Mediterranean type ecosystems. This project is also unique in promoting the preservation and maintenance of indigenous and local communities' knowledge and practices relevant to the conservation and sustainable use of biodiversity.

#### **B.2.** Aspects of the Problem Addressed through UNDP/GEF Intervention

The overall goal of this project is to conserve and sustainably use globally significant biodiversity and to fight against land degradation in three priority natural reserves in Taghit, Mergueb and Oglat Ed Daïra. The immediate objectives of the project are two-fold: promote biodiversity conservation and promote sustainable use of biodiversity and natural resource management in the buffer zone of the three reserves. The project will be implemented in close cooperation with the populations concerned and the NGOs network.

Five ouputs will be developed including 1) development of the three management plans for the three reserves by year one of the project period and establishment of enclosures by year 2 to protect threatened and endemic species. Legal protection measures for the reserve of Taghit, Mergueb and Oglat Ed Daïra will also be established/processed through the national appropriate channels for endorsement. An instrument describing the legal status of the reserves with an outline of protection measures is going to be developed by year 1. Didactic pamphlets, posters and other awareness materials will also be produced and distributed to at least 50% of local population around the reserves, and 60 staff members from local NGOs and the three reserve will be trained on protected area management and participation approaches. Around 150 from the local community target groups will benefit from project rehabilitated areas and from the biodiversity resources value.

Project resources will be distributed as follows: GEF-UNDP resources (US\$750,000, which is 38% of the project overall budget) will target global environmental objectives, i.e. conservation and sustainable use of globally significant biodiversity and protected area management in the three target areas. Government contribution is estimated as US\$1005,000, NGO Network and the local contribution is US\$200,000. In total, the national contribution is about 62 % share and this will mainly address operations supporting the development baseline of the project including addressing sustainable development activities, rehabilitation activities, watering facilities for wildlife, sewage water treatment, etc.

#### Section C. IMMEDIATE OBJECTIVES, EXPECTED OUTPUTS & ACTIVITIES

#### STRATEGIC GOAL:

To conserve and sustainably use globally significant biodiversity and to fight against land degradation in three priority areas in the arid and semi-arid zone ecosystems of Algeria

#### **EXPECTED PROJECT OUTCOMES:**

This project is aimed at mitigating human pressures on the ecosystems by proposing activities to benefit local populations and to involve them in the management of protected areas. The NGOs will play an active role in the implementation of the project. Project activities will be carried out over a period of three years and are expected to produce the outputs listed below. The Government of Algeria through the DGF will be putting around US \$350,000 annually for management of the three reserves. Project activities will not apply to all sites, and will be limited only to those sites where threats are present. The DGF and the implementing NGO will replicate demonstrating activities financially for other sites. See Annex 2 for details on demonstration of project activities per sites.

#### **IMMEDIATE OBJECTIVES:**

- 1) Biodiversity conservation in three natural reserves (Taghit , Mergueb and Oglat Ed Daïra) in Algeria.
- 2) Sustainable use of biodiversity and natural resource management in the buffer zone of the three reserves.

#### **OUTPUTS:**

# Output 1.1: Management plans for the three reserves formulated in line with biodiversity conservation.

#### **Activities:**

- 1. Management plans will be formulated to support biodiversity conservation and sustainable use in the three project sites of Mergueb (M'Sila), Taghit (Béchar) and Oglat Ed Daïra (Aïn Ben Khellil, Naâma). Management plans will reflect on the value of biological resources, likelihood of protection, socio-economic conditions, natural resource agreements, land use planning and tourism potential.
- 2. In order to ensure an integrated participatory approach, from the commencement of implementation, the project will establish local committees directed at conserving biodiversity and combating desertification at the level of each site in the wilaya concerned (Béchar, Naâma, M'Sila).
- 3. In order to develop solid management plans and also to provide a foundation to the information effort aimed at the various population groups concerned, rapid biodiversity assessments will be conducted to update available data on biodiversity and natural resources in each site. Particular emphasis will be placed on the promotion of traditional know-how and practices in Taghit, Naâma and M'Sila.
- 4. In order to integrate the populations in a consultation and participation process, social workers (members of the NGOs) and staff of institutions concerned will be heavily involved in participatory management approaches based on a plan that will be established as part of the management
- 5. The project will set aside *in situ* conservation areas for threatened and endangered plant and wildlife species to protect habitats, ecosystems and the species in as undisturbed a state as possible.

Responsible parties: DGF, national and sites project coordinators

#### **Project Indicators:**

- ? I national committee, 3 site committees will be established at the onset of the project
- ? Participation plan established at project onset
- ? 4 biodiversity assessment reports, 1 socio-economic report and 3 business plans prepared in year
- ? 3 Management plans completed and operational by year 2
- ? Core conservation areas installed in about 2-5% of the three sites and 140 target species protected

#### **Output 1.2:** Legal protection measures implemented

#### **Activities:**

This output will include the establishment at the nature reserve at Oglat Ed Daïra, Megueb and Taghit a legal status that will be ratified by the Government of Algeria in year one of the project period. The formulation of the legal foundation for these protected areas will enable the project to initiate a community based management model, including enforcement activities (warden service) on the site. Various conservation activities will be implemented on these sites in order to help mitigate the natural and anthropogenic threats (see Output 2.1).

<u>Output Amendment:</u> Legal designation status will be developed where relevant for the project sites , and will be processed through the appropriate channels in Algeria.

<u>Responsible parties:</u> DGF, national and sites project coordinators and the NGOs in charge of the activity

#### **Project Indicators:**

? Documents describing legal designation of reserves

#### **Output 1.3:** Environmentally conscious local populations

#### **Activities:**

In view of the fact that the degradation of the ecosystem is due primarily to human pressures, project activities aimed at education, and awareness-raising are an important component of the project. The activities to be undertaken in order to produce this output will be the following:

- 1. In order to support awareness and education efforts, and with a view to benefiting from economies of scale, didactic tools taking into consideration the local context will be elaborated.
- 2. Workshops for the extension of techniques for the sustainable use of biodiversity will be organized. These workshops will be geared to the eco-actors (i.e. pastoralists and crop farmers), focusing on the following themes: a) rational use of rangelands; b) rehabilitation techniques to be applied to steppe zones (Naâma, M'Sila); and c) sand dune stabilization in Naâma in view of the presence of over 1000 ha of sand dunes on the steppe area of the reserve.
- 3. Public awareness campaigns geared to sensitive population groups such as women and youth will be organized by the members of the NGOs and the staff of the local institutions concerned.
- 4. The project will publish a periodical information newsletter by the secretariat of the network to communicate information to the members of the network as well as all interested parties, and activities, programs, and experiences in each site that can be learnt and replicated to other situations in Algeria and possibly elsewhere in the region.

<u>Responsible parties:</u> DGF, national and sites project coordinators and the NGOs in charge of the activity.

#### **Project Indicators:**

? 5,000 didactic materials elaborated and disseminated

- ? 9 informal workshops conducted over three-year period plus many ad hoc ongoing meetings with rural and Bedouin communities
- ? 5,000 posters prepared; 3 awareness campaigns launched; and 50% of local people reached
- ? Newsletter published on regular basis

# Output 1.4: capacity of NGOs network and concerned local institutions improved to manage nature reserves

#### **Activities:**

- 1. The members of the NGOs and the staff of the local institutions concerned will be provided with special training promoting grass-root level consultation, and participatory approaches in the management process
- 2. The members of the NGOs and the staff of the local institutions concerned will be provided with special training on environmental communication. They will then be responsible for awareness-raising and extension workshops.
- 3. The members of the NGOs and the staff of the local institutions concerned will benefit from specific training sessions on the operational concepts involved in the conservation of biodiversity and the fight against desertification.
- 4. Study trips will be organized for representatives from local government agencies and for a dozen members of the NGOs directly involved in the implementation of the project, in order to exchange experiences regarding the conservation of biodiversity and the fight against desertification.
- 5. Training the staff of local NGOs on monitoring biodiversity (ecological abundance, species survival rates, etc.) and on detecting early drought conditions in the three reserves using GIS/GPS applications.
- 6. In order to enhance the dissemination of knowledge, an electronic information exchange system will be established between the members of the NGOs. A web site will be created in order to allow any interested party to access the information available on the network. A documentation center will be supported in Taghit and will constitute a channel whereby the members of the NGOs network as a priority but also any other requesting party will have access to document research and reproduction services.

Responsible parties: DGF, national and sites project coordinators.

#### **Project Indicators:**

- ? 20 trainees trained and instituted
- ? 20 trainees trained; and quality of training materials
- ? 10 trainees trained by year 1
- ? 1 study trip per year to the three reserves
- ? 10 trainees trained by year 1 and quality of data gathered
- ? Documentation center and information network operational, and over 200 users will visit the project web site per month by year 1

#### Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected

#### **Activities:**

In order to mitigate anthropogenic pressures resulting mainly from excessive use of the natural resources, the activities proposed below will bring about an improvement in the economic status of the local population. Some traditional activities, currently undervalued, will be revitalized while new sustainable income-generating activities (of the win-win type) will be introduced, including:

1. Animal-fattening scheme: In order to alleviate the threat of overgrazing on the reserves, the project using sustainable development baseline resources will test/initiate an alternative livelihood option (animal-fattening scheme) targeting Bedouin families in the buffer zone of the reserve. The purpose is to demonstrate with local bedouin communities a pastoral production

systems in sites where no global significant biodiversity is present to provide animals with supplementary feeding thereby reducing numbers of animals and herds in the reserve while at the same time providing enhanced economic benefits to target Bedouin families. This scheme is a successful lesson adopted from the GEF/UNDP project in Dana and Azraq reserves in Jordan. Executed by a national NGO (the Royal Society for the Conservation of Nature), the Dana Azraq project has demonstrated successful results by implementing a goat-fattening scheme targeting local bedouin families living in the south of the Dana wild lands. This project will introduce this scheme in Algeria with an estimated cost of \$120,000, of which GEF will support \$20,000 and the rest will be covered from the NGOs network and local communities.

- 2. Establishment of networks in Taghit and Oglat Ed Daïra reserves promoting local benefits from eco-tourism through enhancing reserve entrance fees and traditional handicraft products. The activities of the handicrafts will make it possible to steer significant local population groups towards environmentally friendly activities. The target beneficiaries will be mostly women and young people who are willing and able to become involved. They will be provided with support for the management of their activities as well as for the promotion and marketing of their products.
- 3. Through non-GEF resources in the Taghit oasis, the local authorities are planning to establish, at mid-term, a wastewater treatment plan for treating wastewater for use in agriculture. Within the framework of this project, support measures will be implemented mainly through assessments, participatory workshops, purchase some equipment and the wastewater collector which will be provided by the Directorate of Hydraulic. Under the component on biodiversity monitoring, the project will oversee biodiversity on the location of the wastewater plant and will make sure that negative impacts are avoided as far as possible. The resulting improvement will have a positive effect on local farmers and will limit their resorting to unsustainable, environmentally aggressive activities to complement their income at the expense of the ecosystems. Thus, the recommended management plans will be more readily implemented.
- 4. Recognizing that in Mergueb site there is a threat of overgrazing leading to loss in rangeland biodiversity and also to land degradation, the project will undertake certain activities in the buffer zone to rehabilitate degraded rangelands using native forage seeds and techniques demonstrated for enriching native flora. GEF will provide incremental costs of removing technological and information barriers for rehabilitation using native seeds (Astragalus, Centaurea, Echium, Ferula, Tamarix, Lotus, Pistacia, Acacia, etc.) rather than imported forage. Co-financing will cover avoided costs generated by rangeland rehabilitation including labor, materials and equipment. An area of 150 ha in the buffer zone of the reserve will be demonstrated for this activity. The cost for this activity will be \$75,000, of which GEF will pay \$25,000, and the GoA will pay \$50,000.
- 5. The project will carry out work to rehabilitate surface water mobilization structures providing watering facilities for wildlife and other globally significant migratory species. It is planned that 10 watering sites (gueltas) will be rehabilitated in various areas in the reserve.

Responsible parties: DGF, sites project coordinators, NGOs in charge of the activity, and local agriculture services.

#### **Project Indicators:**

- ? 150 shepherds/Bedouin families benefit from scheme
- ? Networks launched and efficient; over 2000 handcraft products are sold to tourists and approximately \$10,000 revenue from entrance fees expected by year 2
- ? Assessments and conception studies elaborated and treatment plant installed; surface water pollution stopped by 75% by end of the project
- ? 150 ha rehabilitated and vegetation biomass increased by 50% in the reserve by year 3.
- ? 10 watering gueltas (watering places) rehabilitated in various areas by year 3

#### D. INPUTS

#### D1 Summary of inputs by different partners divided as per project various components

Component	GEF (US\$)	Co-	funding (US \$)	
		GoA and national institutions	NGO-NW and Local communities	Total (US\$)
PDF-A cost	25,000		10,000	35,000
Personnel	232,000	100,000	30,000	362,000
Subcontracting	93,000	588,000		681,000
Training	136,000	100,000	70,000	306,000
Equipment and documentation	200,000	100,000	15,000	315,000
Travels	24,000	100,000	85,000	209,000
Miscellaneous	40,000	17,000		57,000
Total	750,000	1005,000	210,000	1965,000

# D2 Summary of input contributions by different entities as per project Outputs

Output	GEF- UNDP	GoA	NGO-NW & Locals	Total <sup>1</sup>
Output 1.1 Management plans	230,000	100,000	200025	330,000
Output 1.2 Legal protection measures	20,000			20,000
Output 1.3 Environmental Awareness	176,000			176,000
Output 1.4 Training and Capacity Building	164,000	150,000	82,000	396,000
Output 2.1 Sustainabe Use of biodiversity y	135,000	755,000	118,000	1008,000
PDF A	25,000		10,000	35,000
Total	750,000	1005,000	210,000	1965,000

<sup>&</sup>lt;sup>1</sup> See project brief and incremental costs for a detailed information on breakdown of co-funding resources.

#### E. RISKS-SUSTAINABILITY AND PRIOR OBLIGATIONS

The success of project components for restoration of degraded habitats and the policy reforms by the GoA towards biodiversity conservation and sustainable use are inextricably linked with the sustainability of the project. The project has made successful efforts to building a unique partnership with the Government of Algeria and the NGO community to promote biodiversity conservation and to control dry land degradation in areas of national and global importance. The Government of Algeria has welcomed this partnership.

The sustainable use activities of the project (goat fattening scheme, entrance fees and handicraft products) will be income producing and so some of these will advance themselves to potential replication during and after the project. Income generating activities will be managed locally through a modality of a trust facility/fund to be established and agreed upon during the project by representatives from the relevant reserve, the NGO network and the local communities benefiting from activities.

In addition, the project will build capacity of the NGO community and the local institutions in reserve management and participatory approaches, and this will ensure the institutional sustainability of the project after the three-year period.

The social sustainability of the project is ensured through the local-community ownership that was created during the project formulation phase, and through the many informal and participatory meetings that made it possible to reach a consensus on project's organization, objectives and expected results. The early creation of a steering committee, in place for the preparation of the project document, and the ongoing exchange of information between all parties concerned resulted in a sustained participatory process and produced a project in which the needs expressed by all stakeholders have been taken into consideration.

One of the possible risks associated with the project is that of coordination problems arising between the various actors concerned. The existence of a National Steering Committee and Local Support Committees should mitigate this risk by facilitating a dialogue and involving the various actors. In addition, the NGOs newsletter will systematically include information on the implementation of the project.

#### **Prior Obligations:**

The specific financial commitments of each partner in the project are to be ensured prior to launching project implementation. An agreement will be established and signed between project partners and project management according to the schedule of disbursement for contributions, including government contributions.

The Government of Algeria through the DGF is committed annual resources of approximately \$350,000 for the management of the three reserves. This will cover costs of staffs, some equipment, communications, running costs and various operations.

The project document will be signed by UNDP, and UNDP assistance to the project will be provided subject to UNDP receiving satisfaction that the prerequisites listed above have been fulfilled or are likely to be fulfilled. UNDP will reserve the right to suspend disbursement of fund if the above obligations are not met or are violated.

#### F. MANAGEMENT

#### F1 Implementation Arrangements

Nature conservation and protected area management in Algeria falls under the Ministry of Agriculture (General Directorate of Forests - DGF). On the other hand, the administration of national parks falls under the custody of the Ministry of Agriculture except for the national parks of Ahaggar and Tassili, which are under the administration of the Ministry of Culture. The Ministry of Environment plays

national coordinating, strategic planning and advisory role and usually coordinates activities in collaboration with relevant ministries: Agriculture, Tourism, Culture, Education, etc.

Having the above institutional set up in mind, this project will follow an NGO implementation arrangments under the overall supervision of UNDP and the Government of Algeria, represented by the Ministry of Agriculture-Nature Conservation Department. The NGO Network in Algeria will be the principal co-ordinate entity on site for the implementation of this project on behalf of UNDP-GEF and in close co-ordination with the MoA. From within the NGO Network, three NGO anchors will be selected by UNDP following UNDP rules and procedures. A set of selecting criteria would be developed including mainly human capacity with an NGO, on the ground presence in each project reserve, overall NGO budget and absorptive capacity, previous experience in implementing UNDP-GEF projects, etc.

A Project National Coordinator for the whole project will be recruited by UNDP and MoA in coordination with the Project National Steering Committee to be responsible for the coordination of project activities at the national level (see ToRs for details on job descirption of the NPC). The NPC will be hosted in the MoA and will report to the Director General of the DGF. A site Coordinator in each reserve will also be recruited by UNDP and MoA in coordination with the project National Steering Committee and the site anchoring NGO (selected to manage the project at the reserve level).

A National Steering Committee will be created to supervise project activities proceeding smoothly and to help resolve any difficulties impeding the implementation of the project at the national level. The NGOs represented on the National Steering Committee will be designated by the General Assembly of the NGOs involved in coordination with the MoA and UNDP.

A representative list of the institutions to be included on the National Steering Committee could be the National Agency for Nature Conservation, the General Directorate of Forests (DGF), the High Commissariat for Steppe Development (Haut Commissariat au Développement de la Steppe-HCDS), and the Commissariat for the Development of Agriculture in Saharan Regions-CDARS). Ministries of Culture, Environment, Tourism and Education also will be represented on the Steering Committee. Additional members can be added at the onset of the project.

At each selected site, a Local Support and Advisory Committee will be created. These committees will be responsible for the smooth execution of the local activities and for arbitration in the event of conflicts or difficulties. (See ToRs for Local Support and Advisory Committees). In addition to the associations representing the NGOs network at the local level, included in the membership of these committees will be representatives of the administrative entities (Popular municipal assemblies, various professional and cultural associations concerned, environmental inspectorates, forestry conservation entities, directorates of agricultural services and the various branches of the agencies and organizations mentioned above).

The NPC will oversee the elaboration of the terms of reference and books of specifications pertaining to the various activities to be implemented.

All of the activities envisioned within this project at the national level would be coordinated and managed by the NPC. S/he would provide overall coordination to site level activities. The actual execution of the activities can be entrusted to public or private organizations, NGOs, enterprises, associations, and consultants under subcontracting arrangements according to UNDP guidelines for transparency regarding contract awards.

The UNDP Country Office in Algeria will facilitate the timely implementation of the project over the three year period, and will provide the necessary backstopping and supervision to monitor project activities in close cooperation with the steering committee and site committees, and the Government of Algeria.

#### G. MONITORING AND EVALUATION PLAN

The monitoring and performance evaluation of the project on daily basis will be the responsibility of the NPC, and the NGO in charge of the project at the reserve level. For this purpose, a set of

performance indicators will be periodically assessed in order to determine both the general performances of the project and the efficiency of the activities implemented.

The changes recorded in these indicators during the course of the implementation of the project as well as after completion will provide very useful information to take corrective measures and to refine the methodologies and approaches for the preservation of natural resources and the fight against soil degradation.

The project matrix (Annex 7) summarizing the elements of the logical framework identifies practically all of the relevant performance indicators.

The progress accomplished in the implementation of the project will be evaluated periodically both by UNDP and the National Steering Committee.

The monitoring of the project will conform to standard UNDP procedures in this area (supervision missions, regular review, Tri-Partite Review (TPR) and Project Implementation Review (PIR) conducted every year, mid-term review, final review, etc.). UNDP will also ensure that an audit to the project is undertaken every year.

#### H. LEGAL CONTEXT

This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of Algeria and the United Nations Development Program, signed by the two parties on June 1998.

The following types of revisions may be made to this Project Document with the signature of the UNDP Resident Representative only, provided he or she is assured that the other signatories of the Project Document have no objections to the proposed changes:

- 1. Revision in, or addition of, any of the annexes of the Project Document.
- 2. Revisions, which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation.
- 3. Mandatory annual revisions that re-phase delivery of agreed project inputs or increased expert of other costs due to inflation or take into account agency expenditure flexibility

#### I. WORK PLAN FOR THE PROPOSED OUTPUTS

OUTPUTS			PRO	JECT	IMPL	EMEN	TATI	ON (Q	UART	TERS)		
	1	2	3	4	5	6	7	8	9	10	11	12
Management plans for the three reserves updated and implemented in line with biodiversity conservation			X	X	X	X	X	X	X	X	X	X
∠ Legal protection measures implemented		X	X	X	X	X	X	X	X	X	X	X
<ul><li>Environmentally conscious local populations</li></ul>	X	X	X	X	X	X	X	X	X	X	X	X
Capacity building of the NGOs network and concerned local institutions improved to manage nature reserves			X	X	X X	X X	X	X	X X	X	X	
Biodiversity resources are used sustainably and the natural resource base protected			Α	Λ	Α	Α	Λ	Α	Λ	Α	Α	
<b> </b>				X				X				X
				X				X				X

#### Section J. Budget

Programme des Nations Unies Pour le Développement ALG/00/G35 - Renforcement des capacités des ONGs Budget " A"

Ressources Principaux: 1G - Global Environment Trust Fund Agence d'Exécution: NEX - National Execution

Sbln	Description	Ag. de Mise en Oeuvre	Inst.Financement	Total	2002	2003	2004
010	PERSONNEL						
011	Consultants Internationaux						
011.01	International consultant	NEX	Montant Net	30,000	20,000	10,000	
			T/M	0.7	0.5	0.2	0
			Total	30,000	20,000	10,000	
011.99	Total de la Ligne		Montant Net	30,000	20,000	10,000	
			T/M	0.7	0.5	0.2	0
			Total	30,000	20,000	10,000	
013	Assistance Administrative						_
013.01	Logistical support	NEX	Montant Net	10,000	5,000	4,000	1,000
			T/M	0.8	0.5	0.2	0.1
			Total	10,000	5,000	4,000	1,000
013.99	Total de la Ligne		Montant Net	10,000	5,000	4,000	1,000
			T/M	0.8	0.5	0.2	0.1
			Total	10,000	5,000	4,000	1,000
015	Surveillance et Evaluation						_
015.01	in country duty travel	NEX	Montant Net	12,000	4,000	4,000	4,000
			Total	12,000	4,000	4,000	4,000
015.99	Total de la Ligne		Montant Net	12,000	4,000	4,000	4,000
	-		Total	12,000	4,000	4,000	4,000
016	Co-ts de Mission						
016.01	Overseas travel	NEX	Montant Net	12,000	4,000	4,000	4,000
			Total	12,000	4,000	4,000	4,000
016.99	Total de la Ligne		Montant Net	12,000	4,000	4,000	4,000
	· ·		Total	12,000	4,000	4,000	4,000
017	Consutants Nationaux						
017.01	National project coordinator	NEX	Montant Net	36,000	12,000	12,000	12,000
	• •		T/M	36	12	12	12
			Total	36,000	12,000	12,000	12,000

017.02 Site project coordinators (x3)	NEX	Montant Net	27,000	9,000	9,000	9,000
, ,		T/M	108	36	36	36
		Total	27,000	9,000	9,000	9,000
017.03 Management plans for 3 reserves	NEX	Montant Net	85,000	10,000	60,000	15,000
ŭ i		T/M	10	2	5	3
		Total	85,000	10,000	60,000	15,000
017.04 Reserves legal status establishment	NEX	Montant Net	20,000	15,000	5,000	
		T/M	3	2	1	0
		Total	20,000	15,000	5,000	
017.05 Flora native sp rehabilitation	NEX	Montant Net	5,000	5,000		
·		T/M	0.5	0.5	0	0
		Total	5,000	5,000		
017.06 New animal raising systems	NEX	Montant Net	5,000	5,000		
<b>.</b>		T/M	0.5	0.5	0	0
		Total	5,000	5,000		
017.07 Water mobilisation for wildlife	NEX	Montant Net	5,000	5,000		
		T/M	0.5	0.5	0	0
		Total	5,000	5,000		
017.08 Ecotourism support	NEX	Montant Net	10,000	10,000		
		T/M	0.5	0.5	0	0
		Total	10,000	10,000		
017.09 Endemic sp in situ conservation	NEX	Montant Net	5,000	5,000		
		T/M	0.5	0.5	0	0
		Total	5,000	5,000		
017.99 Total de la Ligne		Montant Net	198,000	76,000	86,000	36,000
		T/M	159.5	54.5	54	51
		Total	198,000	76,000	86,000	36,000
019 TOTAL DE PERSONNEL		Montant Net	262,000	109,000	108,000	45,000
		T/M	161	55.5	54.4	51.1
		Total	262,000	109,000	108,000	45,000
020 CONTRATS						
021 Contrat A						
021.01 Didactic material & awarness camp	NEX	Montant Net	70,000	35,000	25,000	10,000
•		Total	70,000	35,000	25,000	10,000
021.99 Total de la Ligne		Montant Net	70,000	35,000	25,000	10,000
<u> </u>		Total	70,000	35,000	25,000	10,000

022	Contrat B						
022.01	Liaison bulletin	NEX	Montant Net	23,000	15,000	6,000	2,000
			Total	23,000	15,000	6,000	2,000
022.99	Total de la Ligne		Montant Net	23,000	15,000	6,000	2,000
			Total	23,000	15,000	6,000	2,000
029	TOTAL DE CONTRATS		Montant Net	93,000	50,000	31,000	12,000
			Total	93,000	50,000	31,000	12,000
030	FORMATION						
032	Formation (autre)						
032.01	Local communities committees forums	NEX	Montant Net	10,000	5,000	3,000	2,000
			Total	10,000	5,000	3,000	2,000
032.02	Local communities participation	NEX	Montant Net	10,000	10,000		
			Total	10,000	10,000		
032.03	Local communities best practices	NEX	Montant Net	20,000		20,000	
			Total	20,000		20,000	
032.04	Graizing areas/Dune stabilisation	NEX	Montant Net	20,000		20,000	
			Total	20,000		20,000	
032.05	Women integration	NEX	Montant Net	20,000		20,000	_
			Total	20,000		20,000	
032.06	Protected areas process	NEX	Montant Net	10,000			10,000
			Total	10,000			10,000
032.07	Environemental communication	NEX	Montant Net	10,000	10,000		
			Total	10,000	10,000		
032.08	Study tours	NEX	Montant Net	16,000		8,000	8,000
			Total	16,000		8,000	8,000
032.09	Biodiversity assessment	NEX	Montant Net	10,000			10,000
ī			Total	10,000			10,000
032.10	Concepts to combate desertification	NEX	Montant Net	10,000		10,000	
			Total	10,000		10,000	
032.99	Total de la Ligne		Montant Net	136,000	25,000	81,000	30,000
			Total	136,000	25,000	81,000	30,000
039	TOTAL DE FORMATION		Montant Net	136,000	25,000	81,000	30,000
			Total	136,000	25,000	81,000	30,000
040	EQUIPEMENT						
045	Equipement						
045.01	Electronic information exchange	NEX	Montant Net	50,000	30,000	15,000	5,000

			Total	50,000	30,000	15,000	5,000
045.02	New animal raising systerms	NEX	Montant Net	20,000		20,000	
			Total	20,000		20,000	
045.03	Ecotourism support	NEX	Montant Net	50,000		30,000	20,000
			Total	50,000		30,000	20,000
045.04	Flora native sp rehabilitation	NEX	Montant Net	20,000		20,000	
			Total	20,000		20,000	
045.05	Endemic sp insitu conservation	NEX	Montant Net	35,000		25,000	10,000
			Total	35,000		25,000	10,000
045.06	Water mobilisation for wildlife	NEX	Montant Net	25,000		20,000	5,000
			Total	25,000		20,000	5,000
045.99	Total de la Ligne		Montant Net	200,000	30,000	130,000	40,000
			Total	200,000	30,000	130,000	40,000
049	TOTAL DE EQUIPEMENT		Montant Net	200,000	30,000	130,000	40,000
			Total	200,000	30,000	130,000	40,000
050	DIVERS						
052	Co-ts des Rapports						
052.01	Reporting-Annual Audit	NEX	Montant Net	15,000	5,000	5,000	5,000
			Total	15,000	5,000	5,000	5,000
052.02	Project reports duplication	NEX	Montant Net	4,000			4,000
			Total	4,000			4,000
052.99	Total de la Ligne		Montant Net	19,000	5,000	5,000	9,000
			Total	19,000	5,000	5,000	9,000
053	Divers						
053.01	Sundries	NEX	Montant Net	15,000	5,000	5,000	5,000
			Total	15,000	5,000	5,000	5,000
053.99	Total de la Ligne		Montant Net	15,000	5,000	5,000	5,000
			Total	15,000	5,000	5,000	5,000
059	TOTAL DE DIVERS		Montant Net	34,000	10,000	10,000	14,000
			Total	34,000	10,000	10,000	14,000
099	TOTAL DU BUDGET		Montant Net	725,000	224,000	360,000	141,000
			T/M	161	55.5	54.4	51.1
			Total	725,000	224,000	360,000	141,000

#### Annexes

#### Annex 1. List of acronyms and abbreviations

ANN National Agency for Nature Conservation

CDARS Commissariat for the Development of Agriculture in Saharan Regions

CoP Conference of Parties

DGF General Directorate for Forests
DGE General Directorate of Environment
FCIL Fonds Canadien des Initiatives Locales

GEF Global Environment Facility

HCDS High Commissariat for Steppe Development
IUCN International Union for Conservation of Nature
IFAD International Fund for Agricultural Development

LSC Local Support Committee

NEAP National Environnemental Action Plan NGO Non-governmental Organization NSC National Steering Committee

PC Project Coordinator

PDF Project Development Fund RNM Nature Reserve of Mergueb

UNDP United Nations Development Program

Annex 2. Summary of outputs and activities with their measurable performance indicators and distribution of costs

#### **Project Objectives and Activities**

### 9. Project rationale and objectives: *Goal*:

To conserve and sustainably use globally significant biodiversity and to fight against land degradation in three priority areas in the arid and semi-arid zone ecosystems of Algeria

#### Objectives:

- 1) Biodiversity conservation in three natural reserves (Taghit, Mergueb and Oglat Ed Daira) in Algeria.
- 2) Sustainable use of biodiversity and natural resource management in the buffer zone of the three reserves.

#### **Indicators:**

- 1. 140 target species increase population size by 40% by the end of the project; plant cover increases by 10% in target areas by the end of project
- 2. 50% of rural and bedouin communities involved in project activities (awareness, outreach, etc.)
- 3. Three updated plans outlining management and enforcement needs
- 4. networks, e-mails, and other communication means improved among all project stakeholders
- 5. 150 shepherds/Bedouin families benefiting from project; 150 ha and 10 watering sites rehabilitated in various areas by year 3

#### 10. Project outcomes

- 1.1 Management plans for the three reserves updated in line with biodiversity conservation.
- 1.2 Legal protection measures for the reserve of Oglat Ed Daira are implemented.
- 1.3 Environmentally conscious local populations.
- 1.4 Capacity of NGOs and concerned local institutions improved to assist in nature reserve management
- 2.1 Biodiversity resources are used sustainably and natural resource base protected.

#### **Indicators:**

Three management plans elaborated by year one; enclosures established by year 2 to protect threatened and endemic species

Instrument describing legal status outlines protection measures by year 1

10,000 didactic pamphlets, posters and other awareness materials produced and distributed to 50% of local population around the reserves

60 staff members from local NGOs and the three reserve trained on protected area management and participation approaches;

150 families from target groups benefiting from output; 150 ha rehabilitated and 140 target species protected

# 11. Project activities to achieve outcomes (including cost in \$ for each activity):

#### 1.1.

- 1.1.1 Organization of forums and establishment of local committees to protect biodiversity and combat desertification at each site (Béchar, Naâma, M'Sila). (Cost: GEF: US\$10,000)
- 1.1.2. Plan for community participation in the management and sustainable use of biological and natural resources. (Cost: GEF: US\$10,000)
- 1.1.3. Biodiversity assessments in the three reserves are carried out with special reference to the social and economic conditions and the traditional know-how and practices. (Cost: GEF: US\$50,000)
- 1.1.4. Update management plans for the three reserves (Cost \$200,000, of which GEF-\$120,000, and \$80,000- GoA) 1.1.5. Enclosures for in situ conservation of endemic and threatened biodiversity (Cost: \$60,000, of which GEF-S\$40,000, and GoA-\$20,000)

#### 1.2.

1.2.1. Establishment of legal status for the nature reserve of Oglat Ed Daira. (Cost: GEF: US\$ 20,000)

#### 1.3.

- 1.3.1. Elaboration of didactic materials adapted to the local context (languages, illustrations, and information). (Cost: GEF: US\$70,000)
- 1.3.2. Series of informal, participatory workshops promoting the

#### **Indicators:**

#### 1.1.

 $1\ national\ committee,\ 3\ site\ committees\ will\ be\ established\ at$  the onset of the project

Participation plan established at project onset

- 4 biodiversity assessment reports, 1 socio-economic report and 3 business plans prepared in year 1
- 3 Management plans completed and operational by year 2

Core conservation areas installed in about 2-5% of the three sites and 140 target species protected

#### 1.2

Document describing legal designation of reserve

#### 1.3.

5,000 didactic materials elaborated and disseminated

rational use of biodiversity, management of grazing lands, vegetation rehabilitation, management of steppe areas, and sand dune stabilization techniques (Cost: GEF: US\$48,000)

1.3.3. Public awareness camp aigns targeting population groups such as women and youth. (Cost: GEF, US\$30,000) 1.3.4. Periodical liaison newsletter. (Cost: GEF, US\$28,000)

#### 1.4

- 1.4.1. Training the members of NGOs and staff of local institutions on consultation and participation in management processes (Cost: GEF, US\$21,000)
- 1.4.2. Training the members of the NGOs and staff of institutions in the area of environmental communication. (Cost: GEF, US\$21.000)
- 1.4.3. Training the members of the NGOs and staff of local institutions on operational concepts of biodiversity conservation and the fight against desertification (Cost: GEF, US\$21,000) 1.4.4. Study trips targeting protected area management will be organized (Cost: GEF, US\$16,000)
- 1.4.5 Training staff of local NGOs on monitoring biodiversity in three reserves (Cost: US\$200,000 of which GEF \$ 35,000.
- 1.4.6. Establishment of an electronic information exchange networks in the three sites and between members of the NGOs' network. A web site will be established. A documentation, education and awareness center will be supported. (Cost: US\$200,000 of which GEF: US\$50,000, and the GoA \$150,000)

#### 2.1.

- 2.1.1. Sustainable and economically viable animal fattening scheme in Mergueb reserve (Cost: \$120,000 of which GEF: \$20,000, NGOs \$25,000)
- 2.1.2. Sustainable forms of eco-tourism (entrance fees) in Taghit and Oglat Ed-Daira promoting traditional handicraft products. (Cost: US\$150,000, of which GEF: US\$60,000, and \$90,000 by GoA)
- 2.1.3. Establishment of a wastewater treatment facility in the palm grove of the Taghit oasis (non-GEF resources-GoA \$ 588,000)
- 2.1.4. Rehabilitation of vegetation using native forage seeds demonstrated to enrich native flora in Mergueb (Cost: US\$75,000, of which GEF:\$25,000, and GoA \$50,000) 2.1.5. Surface water mobilization providing watering facilities for wildlife. (Cost: US\$150,000 of which GEF: \$30,000, NGOs \$93,000, and GoA \$27,000)

9 informal workshops conducted over three-year period plus many ad hoc ongoing meetings with rural and bedouin communities

5,000 posters prepared; 3 awareness campaigns launched; and 50% of local people reached

Newsletter published on regular basis

#### 1.4

20 trainees trained and instituted

20 trainees trained; and quality of training materials

10 trainees trained by year 1

1 study trip per year to the three reserves

10 trainees trained by year 1 and quality of data gathered

Documentation center and information network operational, and over 200 users will visit the project web site per month by year 1

#### 2.1

150 shepherds/Bedouin families benefit from scheme

Networks launched and efficient; over 2000 handicraft products are sold to tourists and approximately \$10,000 revenue from entrance fees expected by year 2

Assessments and conception studies elaborated and treatment plant installed; surface water pollution stopped by 75% by end of the project

 $150\,ha$  rehabilitated and vegetation biomass increased by 50% in the reserve by year 3.

10 watering gueltas (watering places) rehabilitated in various areas by year 3

Annex 3. Incre	mental Cost Assessment		
	Baseline	Alternative	Increment
Global Environmental Benefit  Domestic Environmental Benefit	Globally significant biodiversity is increasingly eroded due to abusive and unsustainable anthropogenic practices  - Short term returns form grazing and agricultural lands, while biodiversity and the ecosystems they are part of are being eroded - modest management efforts if measured by international standards	Rationalized use of biodiversity and natural resources increased through: a) updating available management and monitoring schemes in line with biodiversity conservation and sustainable use, b) creating alternatives options promoting sustainable use and conservation of biodiversity and natural resources, and c) strengthening legal polices and regulatory frameworks to support biodiversity - Long-term benefits for local communities through biodiversity friendly resource use Better management and monitoring of biodiversity and protection of ecosystem integrity	- Biological recovery in ecosystems and species of global significance - Protecting the integrity of ecosystems where globally significant biodiversity is present - Support for global conservation values - Sustainable use of a greater number of globally significant species that are important to local livelihoods  Protection measures for globally significant biodiversity and the ecosystem they are part of  Sustainable use options compatible with local needs to alleviate pressures on globally significant biodiversity
Cost of Output 1.1: Management plans for the three reserves updated and implemented	- In the three sites considered, the level of protection of biodiversity and natural resources includes reserve staff, some equipment, operational costs, but this is too low for adequate protection - The local populations are interested in protecting nature yet not adequately included in the management of the three nature reserves	- Adaptive management in the three sites to ensure long-term preservation of biodiversity - long-term involvement of local population and NGO community in reserve management	- Local forums and committees directed at conserving biodiversity and combating desertification - three updated management plans in line with biodiversity conservation and sustainable use - Involve local populations and NGO community in management of reserves - Rapid biodiversity assessment - Enclosures for in situ conservation
	COST: \$100,000	COST: \$430,000 (of which \$100,000 is co-funding from the GoA and \$100,000 is baseline)	COST: GEF, \$230,000
Cost of output 1.2: Legal protection measures for the reserve of Oglat Ed-Daira	- Efforts to put in place the legal foundation for the reserve of Oglat Ed Daira are essential, but not complete to ensure protection of a rich ecological area	Legal designation of the Oglat Ed Daira reserve and involvement of all partners in the definition of types of protection to be implemented	- Elaboration of a legal status for the protection of the nature reserve of Oglat Ed Daira in accordance with international standards
	COST: \$20,000	<b>COST: \$40,000</b> (of which \$20,000 is baseline)	COST: GEF, \$20,000
Cost of output 1.3: Environmentally conscious local populations	- Current awareness on environmental protection centralized around large municipal areas Practically little extension action geared to the eco-actors in remote areas	- Local population segments are increasingly reached through awareness-raising, extension workshops and education activities	- Awareness campaigns - Didactic tools and periodical information newsletter - Participatory workshops (such as rangeland rehabilitation, steppe zone management, sand dune stabilization) promoting rational use and conservation of biodiversity

	COST: \$500,000	<b>COST:</b> \$676,000 (of which \$500,000 is baseline)	COST: GEF, US\$176,000
Cost of output 1.4:	- Capacity of the NGOs and local	- Level of capacity and capability of the	- Strengthening the NGOs and local institutions network
Capacity building	institutions in managing nature reserves	environmental NGOs network and local	through:
of NGOs and	includes: familiarity in basic field	concerned institutions is increased to meet	- Training sessions on a) grass-root consultation, and
concerned local	surveys; modest know how in data base	management needs, especially in terms of training	participatory approaches in management process, b)
institutions	storage, modest e-communications no	on management of nature reserves, information,	biodiversity friendly techniques to fight against land
improved to	experience in team work and	communication, documentation, and awareness	degradation, and c) operational concepts on conservation,
manage nature	participation, and inadequate training,	raising	management and monitoring of biodiversity
reserves	capacity	_	- Study trips to project sites
			- A web site and a network to facilitate communication and
			information diffusion
	COST: \$1,000,000	<b>COST:</b> \$1,397,000 (of which \$1000,000 is baseline,	COST: GEF, \$164,000
		\$150,000 GoA, and \$82,000 NGOs)	
Cost of output 2.1:	- Various government and NGO	Sustainable use of biodiversity and natural resource	GEF will fund costs of removing technical, technological and
Biodiversity is	programs in the three reserves include	base enhanced through creating incentives and	information barriers to do viable animal fattening scheme,
used sustainably	biodiversity-unfriendly projects such as	biodiversity friendly activities:	entrance fees and traditional handicraft products, rehabilitation
and natural	rehabilitation of steppe zones, projects on	- Animal fattening scheme	of degraded areas, and surface water mobilization structures
resources base	oases and agricultural farms, and projects	- Gate fees and traditional handicraft	providing wildlife with watering facilities
protected	to combat desertification	products	
		- Wastewater treatment facility	
		- Rehabilitation by native forage seeds	
		- Surface water mobilization structures	COST: GEF, \$135,000
	COST: \$2,500,000		
		<b>COST:</b> \$3508,000 (\$2,500,000 is baseline,	
		\$755,000 GoA, \$118,000RIOD)	
Grand Total	\$4,120,000	<b>\$6050,000</b> (of which \$1205,000 is co-funding)	\$725,000

Annex 4: Demonstration of project activities per sites with reference to responsible parties

Annex 4: Demonstration of project activities per sites with				
Output/Activities	Mergueb	Oglat Ed-	Taghit	Responsibility
		Daïa		
Output 1.1.				
1.1.1 Organization of forums and local committees	X	X	X	PC, DGF, RT
1.1.2. Plan for community participation	X	X	X	PC, NGOs, DGF
1.1.3. Biodiversity assessments	X	X	X	Consultants, PC
1.1.4. Update management plan	X	X	X	PC, DGF, consultants
1.1.5. Enclosures for in situ conservation	X	X	X	PC, NGOs, DGF
Output 1.2.				
1.2.1. Establishment of legal status for the nature reserve of			X	GoA, MoA, PC
Oglat Ed Daira.				, ,
Output 1.3.				
1.3.1. Didactic materials	X	X	X	Subcontract
1.3.2. participatory workshops	X	X	X	PC,DGF, RT
1.3.3. Awareness campaign	X	X	X	Subcontract
1.3.4. Periodical liaison newsletter				NGOs, DGF, RT
Output 1.4.				
1.4.1. Training on consultation and participation in	X			Consultants, PC
management processes				
1.4.2. Training on environmental communication		X		As above
1.4.3. Training on biodiversity conservation and the fight			X	As above
against land degradation				
1.4.4. Study trips	X	X	X	ANN, PC, RT
1.4.5 monitoring biodiversity			X	Consultants, PC
1.4.6 Electronic information networks	X	X	X	As above
1.4.7 web site				As above
1.4.8 A documentation and awareness center			X	ANN, PC, CNOA
Output 2.1.				
2.1.1 Animal fattening scheme	X			PC, DGF, consultant
2.1.2 Sustainable forms of eco-tourism-entrance fees		X	X	As above
2.1.3. wastewater treatment facility			X	Subcontract
2.1.4. Rehabilitation by native forage seeds	X		-	As above
2.1.5. Surface water mobilization	X			As above

PC: Project Coordinator, RT: Reserve Team

ANN	EX 5. List of the NGOs involved in the project
1.	Association pour la Recherche sur le Climat et l'Environnement, ARCE
	Oran
2.	Association de Réflexion, d'Echanges et d'Action pour l'Environnement et le Développement, AREA-ED
	Alger.
3.	Association des Amis de la Saoura
	Béchar.
4.	Association Timidoua
	Tamanrasset.
5.	Association de promotion et de développement de la Steppe
	El Bayadh.
6.	Association écologique de Naama
	Naama.
7.	Association culturelle de la wilaya de Béchar
0	Béchar.
8.	Association de Protection de l'Environnement, de la Faune et de la Flore de la wilaya de Béchar Béchar.
9.	Société d'Histoire Naturelle d'Afrique du Nord, SHNAN
٦.	Alger.
10.	Association de développement et de protection de la steppe et de ses resources naturelles, ADPS
10.	M'Sila.
11.	Association Nationale pour la Protection de l'Environnement et de lutte contre la Pollution, APEP
	El Bouni, Annaba.
12.	APIS NAHLA
	Alger.
13.	Mouvement Ecologique Algérien, MEA
	Alger.
14.	Association pour la Protection de l'Environnement de la wilaya de M'Sila
	M'Sila.
15.	Club Scientifique de la wilaya de Khenchela
1.5	Khenchela.
16.	Association pour la Sauvegarde des Ressources Naturelles, ALIW
17	Alger.
17.	Association pour la protection de l'environnement et cadre de vie Bordj Bou Arreridj.
18.	Association pour la Protection de l'Environnement et la lutte contre la pollution
10.	Béni Isguen, Ghardaia.
19.	Union Nationale des Agronomes, UNA, Alger.
20.	Association de protection de l'environnement
	Oued Fodda.
21.	Organisation de Recherche sur les Milieux et l'Environnement, ORME, Sidi Bel Abbès
22.	Association culturelle MINERVE pour la protection des ruines et la sauvegarde de l'environnement
	Tebessa,
23.	Association pour la Protection de l'Environnement de la Wilaya de Ain Defla, APEWAD
	Khemis Miliana
24.	Association Nationale de Volontariat, TOUIZA, Alger
25.	Association Ecologique de Boumerdès, AEB, Boumerdès
26.	Association pour la Sauvegarde et la Promotion de l'Environnement de la Wilaya de Tlemcen, ASPEWIT
	Tlemcen

ANNEX 6 Indicative list of globally significant animal and plant species Annex 6A Animal species

Species	Common names	Distribution	Sites
Erinacers algirus	Algerian hedgehog	Maghreb, Spain	Taghit, Naâma, Mergueb
Paraechinus aethiopicus ssp. Deserti	Desert hedgehog	Northern Sahara, declining	Taghit, Naâma, Mergueb
Fennecus zerda	Fennec	Sahara	Taghit
Poecilictis libyca *	Libyan zorille	Sahara	Taghit
Mellivora capensis	Cape Ratel	Afrotropical	Taghit
Hyaena hyaena **	Striped hyena	Africa, Asia	Taghit, Mergueb
Caracal caracal *	Caracal	Paleotropical	Taghit
Felis margarita *	Sand cat	Sahara	Taghit
Acinomyx jubatus ***	Cheetah	Africa, Asia	Taghit
Gazella dorcas ***	Dorcas gazelle	Sahara, Arabia	Taghit
Gazella cuvieri ***	Mountain gazelle	Endemic, northern Sahara, Maghreb	Naâma, Mergueb
Gazella leptoceros ***	Slender-horned gazelle	Sahara	Taghit
Ammotragus lervia **	Audad	Sahara	Taghit, Naâma
Atlantoxerus getulus ***	Barbary squirrel	Endemic, western Maghreb	Taghit
Gerbillus campestris	Field gerbil	Sahara-Maghreb	Taghit, Naâma, Mergue b
Pachyuromys duprasi	Hammer-tailed gerbil	Endemic, Sahara	Taghit
Meriones shawi	Shaw merion	Endemic, northern Africa and Egypt	Taghit
Jaculus jaculus	Lesser Egyptian gerboa	Endemic	Taghit
Jaculus orientalis	Larger gerboa	Arid and semi-arid zones	Taghit, Naâma
Histrix cristata **	Porcupine	Asia Minor, Southern Europe	Taghit
Ctenodactylus gundi	Atlas gundi	Northern fringe of Sahara	Taghit, Naâma
Ctenodactylus vali	Sahara gundi	Northern Sahara	Taghit
Elephantus rozeti	Rozet elephant shrew	Arid and semi-arid zones	Taghit, Naâma, Mergueb
Agama savignii ***	Tourneville agama	Western Erg exclusively	Taghit
Tarentola neglecta	Gecko	Endemique, northern Sahara	Taghit, Naâma
Cerastes cerastes	Horned viper	Desert regions of Africa and Middle-East	Taghit, Mergueb
Varanus griseus **	Desert varan	Saharo-sindian	Taghit

: Locally threatened species : Regionally threatened species : Globally threatened species

Species	Status	Taghit	Naâma	M'Si
Alyssum macrocalyx	E Alg. Hight presaharan plateaus		X	XX
Amberboa Perralderiana	E Western Sah.	X		
Ammodaucus leucotrichus	E Sah.	X		
Ammosperma cinereum	E Northern Afr.		X	X
Anabasis oropediorum	E Sah.	X		
Anthemis sabulicola	E Northern Sah.	X		
Argyrolobium saharae	E North, northern Sah.	X		
Aristida acutiflora	E Sah , North. Sah., central Sah.	X	X	
Aristida obtusa var. pubescens	E Sah., S. Oran reg. and Morocco	XX		
Aristida sahelica	E Alg. Sahara and Arabia	X	X	
Astragalus akkensis	E Sah. Morocco and Oran reg.	X		
Astragalus geniorum	E Algeria.	X		
Astragalus gombiformis	E Northen Sah.	X		
Astragalus Gombo	E Northen Sah.	X		
Astragalus Vogelii	E Central and Western Sah.	X		
Atractylis aristata	E Central and Western Sah.	X		
Atractylis Babelii	E Western Sah.	X		
Atractylis delicatula	E Southern Morocco, North. Sahara. Algeria.	X		
Atractylis prolifera	E Northern Sah.	X		
Battandiera amaena	E Sah., Oran region.	XR		
Calligonum Azel	E. Western Sah.	X		
Carduncellus devauxii	E Southern Morocco and Oran reg.	X		
Catananche arenaria	E Northern Afr. Predesert		X	X
Centaurea furfuracea	E Northern Sah.	X		
Centaurea incana	E North, Northern Sah.	X	X	X
Centaurea maroccana	E North, Northern Sah.		X	X
Centaurea pungens	E Western Sah.	X		
Chrysanthemum macrocarpum	E Sah.	X	X	X
Cleome amblyocarpa	E Southern Oran reg., S-E Morocco	X		
Convolvulus supinus	E Sah.	X		
Convolvulus Trabutianus	E Southern Oran reg. and Western sah.	X		
Coronopus lepidioides	Е	X		
Crambe Kralickii	E High plateaus		XR	XR
Crotalaria saharae	E Sah (Northern Sah.)	X		
Crotalaria Vialattei	E Southern Oran reg., S-E Morocco	X		
Danthonia fragilis	E Great Western Erg	XR		
Daucus biseriatus	E Northern Sah.	X		
Dianthus Crinitus	E Sah., Northern Sah.	X		
Diplotaxis Pitardiana	E Southern Oran reg.	XR		
Echiochilon Chazali	E Western Sah.	X		
Echiochilon fruticosum	E Northern Sah.	X		
Echium horridum	E Northern Sah.	X		
Echium pycnanthum	E Northern Afr., Northern Sah.	X		
Ephedra alata	E Central and Western Sah.	X		
Ephedra altissima	E Central and Western Sah.	X		
Ephedra Rollandii	E Southern Oran reg., S-E Morocco	XR		
Eremophyton Chevallieri	E S. Oran reg. and S. Morocco	XR		<del>                                     </del>

Eryngium ilicifolium	E Northern Sah.	X		
Euphorbia calyptrate	E Northern, central and western	X		
	Sah.			
Euphorbia Flamandi	E Western Sah.	X		
Euphorbia granulata	E Western Sah.	X		
Euphorbia Guyoniana	E predesert, Northern Sah.		X	X
Fagonia isotricha	E Western Sah.	X		
Fagonia longispina	E Sah., Moroccan Sah. and Oran reg.	X		
Fagonia zilloides	E Southern Oran reg., S-E Morocco	X		
Ferula Cossoniana	E Southern Oran reg.	X		
Foleyola Billottii	E Ougarta, Southern Oran reg.	X		
Fredolia aretioides	E Southern Oran reg., S-E	X		
	Morocco			
Gaillonia Reboudiana	E Northern and Western Sah.	X		
Genista saharae	E Northern Sah.	X	X	
Glossonema Gautieri	E Central and Western Sah.	XR		
Helianthemum eriocephalum	E Northern Sah.	X		
Helianthemum gaetulum	E Northern Sah.	X		
Hyoscyamus Falezlez	E Western Sah.	X		
Hypecoum Geslini	E Nortern Afr.	XR		XR
Koeleria Rohlfsii	E Western Sah.	X		
Launaea acanthoclada	E Northern Sah.	X		
Lifago Dielsii	E Western Sah.	X		
Limoniastrum ifniense	E Southern Oran reg., S-E	X		
	Morocco			
Limonium asperrimum	E Western Sah.	X		
Limonium Bonduelli	E Western Sah.	X		
Linaria Peltieri	E Southern Oran reg. and S.	X		
	Morocco			
Limoniastrum Wegyandiorum	E Western Sah.	X		
Lonchophora Capiomontana	E High presaharan plateaus		X	X
Lotononis dichotoma	E S. Oran reg., Hoggar, Tibesti	X		
Lotus jolyi	E Central Sah., Northern Sah.	XR		
Lotus Roudairei	E Norhern Sah.	X		
Marrubium deserti	E Northern and central Sah.	X		
Matthiola maroccana	E Southern Oran reg. and S. Morocco	X		
Mecomischus halimifolius	E Northern Sah., in dunes	X		
Moricandia Foleyi	E Southern Oran reg.	XR		
Moricandia spinosa	E Northern Sah.	X		
Muricaria prostrata	End. High plateaus, presahar.		XX	XX
Nucularia Perrini	E Sah. central, Sah occ.	X		
Ononis angustissima	E North Northern Sah.	X		
Ormenis eriolepis	E Southern Morocco and Western	X		
Pistacia atlantica	Sah. E Northern Afr.		X	X
Pituranthos Battandieri	E Sah. in Oran reg. and Morocco	XR		71
Pituranthos chloranthus	Northern Sah.	X		
Plantago akkensis	E Southern Morocco and South.	X		
	Oran reg.			
Pseuderucaria Toureneuxii	E Alg. Sah.	X		
Pulicaria laciniata	E Northern Sah.	X		

Randonia Africana	E Western Sah.	X		
Reseda Alphonsii	E Sah.	XR		
Rhetinolepis lonadioides	E South. Oran and Algiers regions	X	X	X
Saccocalyx satureoides	E Alg. High plateaus, presahar.	X	X	X
Senecio massaicus	E Southern Oran reg., S-E Morocco	X		
Stephanochilus Omphalodes	E Sah.	X		
Tamarix Balansae	E Western Sah.	X		
Tamarix Boveana	E Northern Sah.	X		
Tamarix brachystylis	E Western Sah.	X		
Tamarix getula	E South. Morocco and South Oran reg.	X		
Tamarix Male nconiana	E Southern Oran reg., S-E Morocco	X		
Tamarix pauciovulata	E Sah.	X		
Telephium sphaerospermum	E Southern Oran reg., S-E Morocco	X		
Tourneuxia variifolia	E Northern Sah.	X		
Trichodesma calcaratum	E Sah. in Oran Reg. and South Morocco	X		
Urginea noctiflora	E Northern Sah., Southern Oran reg.	X		
Warionia Saharae	E S-E Morocco and S. Oran reg.	X		
Withania adpressa	E Western Sah.	X		
Zilla macroptera	E N-W Sah.	X		
Zygophyllum Geslini	E Sah.	X		

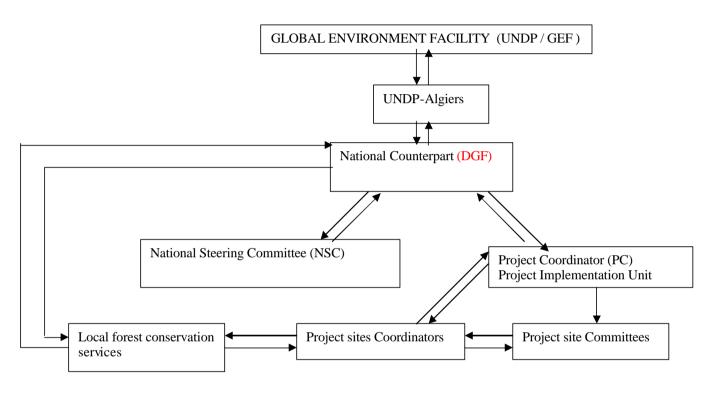
E: Endemic, Alg.: Algeria, Sah.: Sahara, R: Rare

ANNEX 7 Project Planning Matrix

AINI	NEX 7 Project Planning Matrix		1	
	INTERVENTION STRATEGY	OBJECTIVELY VERIFIABLE INDICATORS	VERIFICATION MEANS / SOURCES	IMPORTANT REQUIREMENTS
To sign deg	erall Goal: conserve and sustainably use globally nificant biodiversity and to fight against land radation in three priority areas in the arid and ni-arid zone ecosystems of Algeria			
Pro	ject objectives:	- 140 target species increase in population size by	Project Coordinator's work plan	To achieve the general objective:
2)	Biodiversity conservation in three natural reserves (Taghit Mergueb and Oglat Ed Daïra) in Algeria.  Sustainable use of biodiversity and natural resource management in the buffer zone of the three reserves.	40% and plant cover increased by 10% by end of project; 50% of rural/bedouin communities involved in project; 3 updated management plans; 60 staff members trained on various aspects of biodiversity and participation approaches; networks, e-mails, communication means improved - 150 shepherds/nomad families benefit from project; 150 ha of degraded lands and 10 watering gueltas rehabilitated by year 3	NGOs participation reports     Status of projects produced     Reports on studies and inventories     Minutes of meetings and reports on actions undertaken targeting the populations     Progress of projects to create entities for the biodiversity protection	Actual commitment of public authorities     NGOs capitalize on project advantages, in particular by limiting delegates' turnover     Participatory approaches actually applied and taking into consideration local socioeconomic factors.
Ou	tputs:			
Æ	Management plans for the three reserves updated and implemented in accordance with biodiversity conservation	3 completed management plans, 4 Biodiversity assessment reports, 1 socio-economic report and 3 business plans prepared in year 1	documents of updated management plans, and biodiversity reports	Local people respect set aside agreements in management plans
£	Legal protection measures implemented	Variety of support measures designed	Document of legal status	formulated regulations are respected by public authorities
£	Environmentally conscious local populations	50% local people reached by various awareness-raising and extension initiatives	various progress reports and study reports	Local associations concerned have appropriate work space and phone lines
£	Capacity building of the NGOs and concerned local institutions improved to	60 staff member trained and potential capacity acquired, better performance communications system	training materials and documents, evaluation reports	
£	manage nature reserves  Biodiversity resources are used sustainably and the natural resource base protected	150 shepherds/nomad families benefit from project; 150 ha of degraded lands and 10 watering gueltas rehabilitated by year 3	Implementation reports on various work sites	Community agreements are recognized and adhered to by bedouin

#### ANNEX 8

#### PROJECT ORGANIZATION CHART



# Actors responsible for activities executed at activities executed to off-site, entrusted to third parties (NGOs, consultants, various suppliers/ vendors, etc.) Actors responsible for PC responsible for direct execution of off-site activities executed other off-site activities

Annex 9. Table of threats and causes to biodiversity and proposed project activities

Threat 1: Output 1.1: Management plans for the reserves updated and implemented in with towersity conservation.  Root cause: Open access into the reserves by shepherds due to weakness in traditional tribal systems in Algeria  Threat 2: Disturbance and littering in key habitats in Taghit and Oglat Ed Daira  Boar Cause: Unmanaged and growing number of tourists  Root cause: Unmanaged and growing number of tourists  Threat 3: Land and ecosystem conversion (Taghit).  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation of the cause described in the describination crombat improved asseptive and wareness-raising are an important competent of the project.  d) Output 1.3: Environmentally conscious local populations. In view of the fact that the degradation of the cocystems is due to primarily to human pressures, project advises in traditional tribal systems in Algeria  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation of the combat improved a describination combat improved and describination combat improved to the describination of the project.  Activities for Output 1.1: Establish hoteal forum and local committee in each site for conserving biodiversity and exchising describation on a plan on participatory management approaches undertake rapid biodiversity, seasorates in each site of Update management plans for the three sites. Plans where relevant will refer to legal enforcement, proper incentives, resource agreements, sustainable enforcement, proper incentives, resource agreements, sustainable and use of incommittee in each site for conserving biodiversity and exchising described in a plan on participatory management approaches undertake rapid biodiversity, seasonents in each site of Update management plans for the three sites. Plans where relevant will refer to legal enforcement, proper incentives, resource are undertake rapid biodiversity seasorates in each site of Update management plans for the three sites. Plans wh	Annex 9. Table of threats and causes to biodiversity and proposed project activities								
reserve by shepherds due to weakness in traditional tribal systems in Algeria  Threat 2: Disturbance and littering in key habitats in Taghit and Oglat Ed Daira are implemented or Daira Particles  Root Cause: Unmanaged and growing number of tourists  Threat 3: Land and ecosystem conversion (Taghit).  Threat 4: Water contamination and land degradation (Taghit)  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Threat 6: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  The cause: Unsustainable agricultural practices  Root cause: Possewage water treatment  The cause: Unsustainable agricultural practices  Activities for Output 1.3: Biodiversity and the fight against describing in the natural resource base protected.  Activities for Output 1.3: Diadactic tools taking into consideration the local cornex will be elaborated on participatory management approaches to the three sites. Plans where relevant will refer to legal enforcement, proper incentives, resource agreements, sustainable ecotourism and land use planing  In situ conservation areas for threatened and endangered plant and wildlife species where the legal foundation for the nature reserve of Oglat Ed Daira  Activities for Output 1.4  Training on gass-root consultation and participatory approaches in management or Training on gass-root consultation and participatory approaches in management or Training on one prironmental communication  Training on openitoring biodiversity dynamics  Study trips directed at protected area management  Training on openitoring biodiversity dynamics  Study trips directed at protected area management  Training on openitoring biodiversity dynamics  Study trips directed at protected area management  Training on openitoring biodiversity dynamics  Study trips directed at protected area management  Training on openitoring biodiversity dynamics  Study trips directed at protected area management  Trai									
with biodiversity conservation.  b) Output 1.2:Legal protection measures for Oglat Ed Daïra are implemented for Oglat Ed Daïra are implemented color or Oglat Ed Daïra are implemented paira.  Threat 2: Disturbance and littering in key habitats in Taghit and Oglat Ed Daïra are implemented paira.  Root Cause: Unmanaged and growing number of fourists  Root Cause: Unmanaged and growing number of fourists  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  with biodiversity conservation.  b) Output 1.3: Environmentally conscious lead populations. In view of the fact that the degradation of the ecosystems is due primarily to human pressures, project activities aimed at education and awareness-raising are an important conversion (Taghit).  d) Output 1.4: Capacity building for biodiversity conservation and desertification combat improved esserbification combat improved esserbification combat improved esserbification combat improved base protected.  d) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  d) Output 2.1: Biodiversity presources are used sustainably and the natural resource base protected.  d) Output 3.1: Biodiversity building for biodiversity conservation and desertification combat improved esserbification combat improved will be elaborated workshops addressing a) rational use of rangelands biodiversity outings and eco-tourism and biodiversity outings and ecotourism and land degradation (Taghit)  End Daïra  Activities for Output 1.3  Support electronic information network, a web-site, and a documentation center of Didactic tools using into consideration the local context will be elaborated workshops addressing a) rational use of rangelands biodiversity outings and ecotourism and biodiversity outings and ecotourism and formation network, a	Threat 1: Overgrazing in Mergueb								
Root Cause: Unsustainable agricultural ractices  Threat 3: Land and ecosystem conversion (Taghit).  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Root cause: Unmanaged and growing an an important communication  Root cause: No sewage wate	reserve								
b) Output 1.2:Legal protection measures for Oglat Ed Daïra are implemented color biodiversity of the three sites. Plans where relevant will refer to legal enforcement, proper incentives, resource agreements, sustainable ecotourism and land use planning number of tourists.  Root Cause: Unmanaged and growing number of tourists.  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit).  Root cause: No sewage water treatment  Threat 5: Land and ecosystem conversion (Taghit).  Root cause: No sewage water treatment  Threat 6: Water contamination and land degradation (Taghit).  Root cause: No sewage water treatment  Threat 6: Water contamination and land degradation (Taghit).  Root cause: No sewage water treatment  Threat 6: Water contamination and land degradation (Taghit).  Root cause: No sewage water treatment  Threat 7: Water contamination and land degradation (Taghit).  Root cause: No sewage water treatment  Threat 6: Water contamination and land degradation (Taghit).  Root cause: No sewage water treatment of the project.  Root cause: No sewage water treatment of the project of		with biodiversity conservation.							
for Oglat Ed Daïra are implemented  Threat 2: Disturbance and littering in key habitats in Taghit and Oglat Ed Daïra  Root Cause: Unmanaged and growing number of tourists  Threat 3: Land and ecosystem conversion (Taghit).  Threat 3: Land and ecosystem conversion (Taghit).  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Pool tause: No sewage water treatment  Threat 4: Water contamination and land land learn degradation (Taghit)  Root cause: No sewage water treatment  Threat 6: Disturbance and littering in key habitats in Taghit and Oglat Ed Daïra are implemented on the fact that the degradation of the ecosystems is due primarily to human pressures, project activities aimed at education and awareness-raising are an important component of the project.  d) Output 1.4: Capacity building for biodiversity conservation and desertification combat improved  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  e) Output 2.1: Biodive									
Threat 2: Disturbance and littering in key habitats in Taghit and Oglat Ed Daira  Root Cause: Unmanaged and growing number of tourists  Conversion (Taghit).  Threat 3: Land and ecosystem conversion (Taghit).  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Root cause: No sewage		b) Output 1.2:Legal protection measures							
Threat 2: Disturbance and littering in Rey habitats in Taghit and Oglat Ed Daira  Root Cause: Unmanaged and growing number of tourists  Threat 3: Land and ecosystem conversion (Taghit).  Threat 3: Land and ecosystem conversion (Taghit).  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Treatment  Threat 5: Land and ecosystem conversion (Taghit).  Root cause: Unsustainable agricultural practices  Threat 6: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Treatment  Training on environmental communication of the fight against descrification combat improved especially building for budyers type and descrification combat improved especially building for budyers type and descrification combat improved especially building for budyers type and descrification of the project.  Training on environmental communication and descrification of the project.  Training on environmental communication and descrification of populations and descrification of populations and descrification of the project.  Training on environmental communication of the interpretation of population and participatory approaches in management  Training on environmental communication.  Sudy trips directed at protected are management  Training on monitoring biodiversity dynamics  Support electronic information network, a web-site, and a documentation center  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture, b) rehabilitation techniques applied to steppe zones (Naāma, M'Sila); and c) sand dune stabilization in Naāma reserve  Publis a periodical information newsletter  Activities for Output 1.1  Activities for Output 1.2.  Extablish the legal foundation for the nature reserve of Oglat Ed Daira  Training on environmental communication  Training on protected are management  Training on restroated concepts of conservation of biodiversity dynamic	in traditional tribal systems in Algeria	for Oglat Ed Daïra are implemented							
local populations. In view of the fact that the degradation of the ecosystems is due primarily to human pressures, project activities aimed at education and awareness-raising are an important component of the project.  Threat 3: Land and ecosystem conversion (Taghit).  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Root cause: No sewage water treatment water treatment water treatment  Root cause: No sewage water treatment water treatment water treatment water treatment water treatment water treatment water water treatment water water treatment water w			enforcement, proper incentives, resource agreements, sustainable ecotourism and land use						
be degradation of the ecosystems is due primarily to human pressures, project activities aimed at education and awareness-raising are an important component of the project.  Threat 3: Land and ecosystem conversion (Taghit).  **Out cause:* Unsustainable agricultural practices**  Threat 4: Water contamination and land degradation (Taghit)  **Root cause:* No sewage water treatment**  **Root cause:* No sewage water tre	<b>Threat 2:</b> Disturbance and littering in								
primarily to human pressures, project activities aimed at education and awareness-raising are an important component of the project.  Threat 3: Land and ecosystem conversion (Taghit).  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  **Root cause: No sewage water treatment**  **Root cause: Output 1.4:  **Activities for Output 1.3:  **Root cause: Output	key habitats in Taghit and Oglat Ed	local populations. In view of the fact that							
activities aimed at education and awareness-raising are an important component of the project.  Threat 3: Land and ecosystem conversion (Taghit).  d) Output 1.4: Capacity building for biodiversity conservation and desertification combat improved practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Root cause: No sewage water treatment  Root cause: No sewage water treatment  Activities for Output 1.4  Training on operational concepts of conservation of biodiversity and the fight against describing on operational concepts of conservation of biodiversity and the fight against describing on operational concepts of conservation of biodiversity and the fight against describing on operational concepts of conservation of biodiversity and the fight against describing on operational concepts of conservation of biodiversity and the fight against describing on operational concepts of conservation of biodiversity and the fight against describing on operational concepts of conservation of biodiversity and the fight against describing on operational concepts of conservation of biodiversity and the fight against describing on operational concepts of conservation of biodiversity and the fight against describing on operational concepts of conservation of biodiversity dynamics Support electronic information network, a web-site, and a documentation center  Training on monitoring biodiversity dynamics Support electronic information network, a web-site, and a documentation center  Training on monitoring biodiversity dynamics Support electronic information network, a web-site, and a documentation center  Training on monitoring biodiversity dynamics Support electronic information network, a web-site, and a documentation center  Training on operational concepts of conservation of biodiversity dynamics Support electronic information network, a web-site, and a documentation center  Training on operational concepts of conservation of biodiversity friends agriculture, by rehabilitat	Daïra	the degradation of the ecosystems is due	- Activities for Output 1.2. Establish the legal foundation for the nature reserve of Oglat						
awareness-raising are an important component of the project.  Threat 3: Land and ecosystem conversion (Taghit).  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Activities for Output 1.3  Didactic tools taking into consideration the local context will be elaborated  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture, by rehabilitation techniques applied to steppe zones (Naâma, MSila); and c) sand dune stabilization in Naâma reserve  Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth  Publish a periodical information newsletter  Activities for Output 2.1  Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila.  Promotion of entrance fees, local funds and local traditional handicraft products  A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.  Roat cause: No sewage water treatment base protected.  Training on environmental communication  Training on environmental communication  Study trips directed at protected area management  Training on environmental communication  Study trips directed at protected area management  Training on environmental communication  Study trips directed at protected area management  Training on environmental communication  Study trips directed at protected area management  Training on environmental communication  Study trips directed at protected area management  Training on operational concepts of conservation of biodiversity and the fight against desertification  Study trips directed at protected area management  Training on environmental communication  Training on environmental communication  Training on environmental communication  Training on environmenta		primarily to human pressures, project	Ed Daïra						
awareness-raising are an important component of the project.  Threat 3: Land and ecosystem conversion (Taghit).  Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Root cause: Unsuation and participatory approaches to conservation of biodiversity and the fight against described in consideration of biodiversity and the fight described in training	Root Cause: Unmanaged and growing		- Activities for Output 1.4						
Threat 3: Land and ecosystem conversion (Taghit).  **Boot cause: Unsustainable agricultural practices**  Threat 4: Water contamination and land degradation (Taghit)  **Root cause: No sewage water treatment**  **Root cause: No sewage water t	number of tourists	awareness-raising are an important							
Threat 3: Land and ecosystem conversion (Taghit).  **Boot cause: Unsustainable agricultural practices**  Threat 4: Water contamination and land degradation (Taghit)  **Root cause: No sewage water treatment**  **Root cause: No sewage water t		component of the project.	- Training on environmental communication						
Root cause: Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Evaluate the service of the service	Threat 3: Land and ecosystem		- Training on operational concepts of conservation of biodiversity and the fight against						
Root cause; Unsustainable agricultural practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause; No sewage water treatment  Root cause; No sewage water treatment  description combat improved e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  Activities for Output 1.3  Didactic tools taking into consideration the local context will be elaborated  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture, b) rehabilitation techniques applied to steppe zones (Naāma, M'Sila); and c) sand dune stabilization in Naāma reserve  Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth  Publish a periodical information newsletter  Activities for Output 2.1  Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila.  Promotion of entrance fees, local funds and local traditional handicraft products  A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.  Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.  At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife	conversion (Taghit).		desertification						
practices  Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  Publish a periodical information newsletter  Activities for Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  Support electronic information network, a web-site, and a documentation center  Activities for Output 1.3  Didactic tools taking into consideration the local context will be elaborated  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture, b) rehabilitation techniques applied to steppe zones (Naâma, M'Sila); and c) sand dune stabilization in Naâma reserve  Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth  Publish a periodical information newsletter  Activities for Output 1.1  Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila.  Promotion of entrance fees, local funds and local traditional handicraft products  A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.  Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.  At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife		biodiversity conservation and	- Study trips directed at protected area management						
Threat 4: Water contamination and land degradation (Taghit)  Root cause: No sewage water treatment  e) Output 2.1: Biodiversity resources are used sustainably and the natural resource base protected.  Activities for Output 1.3  Didactic tools taking into consideration the local context will be elaborated  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture, b) rehabilitation techniques applied to steppe zones (Naāma, M'Sila); and c) sand dune stabilization in Naāma reserve  Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth  Publish a periodical information newsletter  Activities for Output 1.3  Activities for Output 1.3  Didactic tools taking into consideration the local context will be elaborated  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture, b) rehabilitation techniques applied to steppe zones (Naāma, M'Sila); and c) sand dune stabilization in Naāma reserve  Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth  Publish a periodical information newsletter  Activities for Output 1.3  Activities for Output 1.3  Didactic tools taking into consideration the local context will be elaborated  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture.  Public awareness campaigns promoting biodiversity periodical information newsletter  Activities for Output 1.3  Activities for Output 1.3  Didactic tools taking into consideration the local context will be elaborated  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity, outings and eco-tourism and biodiversity. Public are reading periodical information on Naāma reserve  Public awareness campaigns promoting biodiversity periodical information on Naāma reserve  Publish a period	Root cause: Unsustainable agricultural	desertification combat improved	- Training on monitoring biodiversity dynamics						
Threat 4: Water contamination and land degradation (Taghit)  used sustainably and the natural resource base protected.  Didactic tools taking into consideration the local context will be elaborated  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture, b) rehabilitation techniques applied to steppe zones (Naâma, M'Sila); and c) sand dune stabilization in Naâma reserve  Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth  Publish a periodical information newsletter  Activities for Output 2.1  Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila.  Promotion of entrance fees, local funds and local traditional handicraft products  A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.  Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.  At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife	practices		- Support electronic information network, a web-site, and a documentation center						
Threat 4: Water contamination and land degradation (Taghit)  Boot cause: No sewage water treatment  Solution and land degradation (Taghit)  Boot cause: No sewage water treatment  Solution and land degradation (Taghit)  Solution and land degradation the local context will be elaborated  Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture, b) rehabilitation techniques and biodiversity-friendly agriculture, b) rehabilitation techniques and eco-tourism and biodiversity-friendly agriculture, b) rehabilitation techniques and biodiversity-friendly agriculture, b) rehabilitati			- Activities for Output 1.3						
land degradation (Taghit)  base protected.  - Workshops addressing a) rational use of rangelands biodiversity, outings and eco-tourism and biodiversity-friendly agriculture, b) rehabilitation techniques applied to steppe zones (Naâma, M'Sila); and c) sand dune stabilization in Naâma reserve  - Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth  - Publish a periodical information newsletter  - Activities for Output 2.1  - Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila.  - Promotion of entrance fees, local funds and local traditional handicraft products  - A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.  - Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.  - At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife	Threat 4: Water contamination and	used sustainably and the natural resource							
Root cause: No sewage water treatment  and biodiversity-friendly agriculture, b) rehabilitation techniques applied to steppe zones (Naâma, M'Sila); and c) sand dune stabilization in Naâma reserve  - Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth - Publish a periodical information newsletter  - Activities for Output 2.1 - Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila Promotion of entrance fees, local funds and local traditional handicraft products - A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife	land degradation (Taghit)	base protected.							
treatment  - Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth - Publish a periodical information newsletter  - Activities for Output 2.1 - Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila Promotion of entrance fees, local funds and local traditional handicraft products - A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife									
treatment  - Public awareness campaigns promoting biodiversity geared to sensitive population groups such as women and youth - Publish a periodical information newsletter  - Activities for Output 2.1 - Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila Promotion of entrance fees, local funds and local traditional handicraft products - A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife	Root cause: No sewage water		(Naâma, M'Sila); and c) sand dune stabilization in Naâma reserve						
such as women and youth  - Publish a periodical information newsletter  - Activities for Output 2.1  - Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila.  - Promotion of entrance fees, local funds and local traditional handicraft products  - A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.  - Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.  - At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife	treatment								
<ul> <li>Publish a periodical information newsletter</li> <li>Activities for Output 2.1</li> <li>Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila.</li> <li>Promotion of entrance fees, local funds and local traditional handicraft products</li> <li>A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.</li> <li>Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.</li> <li>At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife</li> </ul>									
<ul> <li>Activities for Output 2.1</li> <li>Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila.</li> <li>Promotion of entrance fees, local funds and local traditional handicraft products</li> <li>A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.</li> <li>Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.</li> <li>At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife</li> </ul>									
<ul> <li>Develop an animal fattening scheme targeting local shepherds/Beduoin families in M'Sila.</li> <li>Promotion of entrance fees, local funds and local traditional handicraft products</li> <li>A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.</li> <li>Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.</li> <li>At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife</li> </ul>									
<ul> <li>Promotion of entrance fees, local funds and local traditional handicraft products</li> <li>A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.</li> <li>Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.</li> <li>At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife</li> </ul>									
<ul> <li>A wastewater treatment plant in the Taghit oasis for treating wastewater for use in agriculture.</li> <li>Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.</li> <li>At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife</li> </ul>									
agriculture.  - Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.  - At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife									
<ul> <li>Rehabilitate degraded areas in the Mergueb reserve using native forage seeds and techniques enriching native flora.</li> <li>At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife</li> </ul>									
techniques enriching native flora.  - At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife									
- At the Mergueb site, rehabilitate surface water mobilization structures to provide wildlife									
			with watering facilities						

#### **Annex 10** ToRs for Steering Committees

#### 1. Project Steering Committee

This committee will include the following:

- Ministry of Foreign Affairs
- Ministry of Agriculture
- Ministry of Hydraulic
- Ministry of Fisheries
- Ministry of Culture
- Ministry of Environment
- Ministry of Interior
- National Agency for Nature Protection
- Representative of the NGO network to be elected by the network,
- National Project Coordinator on behalf of the PMU and
- LINDP

The terms of reference of the Committee are as follows:

- Review the technical reports produced by the project and accept-reject their recommendations
- Create a framework for exchange of views and harmonization of activities
- Agree on the annual work plan of the project and examine linkages with other ongoing projects
- Review monthly progress reports, quarterly work plans, expenditures and budget revisions
- Ensure that the views of local people are fully taken into account in the implementation and management process
- Stimulate the search for additional resource mobilization to implement activities/proposals emanating from the different technical reports
- Coordinate with the PIU and the agencies they represent to support project objectives

The committee may decide later to include qualified experts, or relevant institutions. Minutes of each meeting are recorded and circulated to the members. The Committee will meet quarterly or as needed at the initiative of the Chairperson.

#### 2. Local Support and Advisory Committees

Three local or site steering committees should be established, one in each reserve. The committee will be responsible for:

- Provide overall guidance to the Project Site Manager
- Overse overall project execution at the site level
- Mediate to solve issues and provide guidance in the event of conflicts or difficulties

#### Potential representatives include:

- Local community administrative service
- Local forest service
- Local Hydraulic services
- Local Agriculture services
- Representatives of civil society
- Representatives of local NGOs
- Local Inspectors of Environment

#### 3. National Project Coordinator

Under the full supervision and monitoring of Ministry of Agriculture and UNDP, the National Project Coordinator will be the key focal point for the daily coordination of the project and his/her tasks will be as follows:

- Establishment and management of the Project Implementation UNIT in the MoA
- Ensure timely implementation of the different project activities and cost effective management of financial resources
- Preparation of ToRs and Job description for project staff, subcontracts, international and national consultants and discuss these with UNDP-GEF and DGF before issuing contracts.
- Reporting to the steering committee project performance and work quality and following up implementation of steering committee recommendations
- Maintain regular contact and open dialogue with the site managers, site coordinating NGOs and other national stakeholders and local communities as well as interested groups
- Coordination of input of national and international consultants and ensure the high quality of their deliverables
- Circulation of information concerning the project, its activities, and the wider activities of other Ministries specifically concerning the project three reserves
- Assist and advise the local stakeholder agencies in the implementation of their activities under the project.
- Preparation of all the necessary monitoring, evaluation and technical reports required by UNDP-GEF and ensure timely submission of these reports as requested
- Represent the project in relevant seminars and meetings and dissemination of project results
- Convene project national steering committee meetings and guide the convening of local advisory committee meetings
- Working on mobilizing additional resources for the project and developing linkages with similar initiatives

#### Qualifications

- A University advanced degree in environmental management, dryland ecology, Agriculture management, Botany Zoology, etc.
- Experience of project management preferably in an environmental field
- Experience of working with local communities and Private sector and NGOs
- Familiarity with the three reserve areas
- Ability to communicate and work effectively with a wide range of project partners
- Capacity to write reports and manage budgets
- Fluent in Arabic, English and French

#### Annex 11 PROJECT ACTIVITIES WORK PLAN

Year	1			2				3				
1 0 11	1	2	3	4	5	6	7	8	9	10	11	12
Activity	-					-	<u> </u>			10		
National Steering Committee establishment												
Local Steering Committees establishment	X											
Recruitment of National Coordinator	X											
Recruitment of sites Project Coordinators	X											
National Steering Committee establishment	X											
Sites Steering Committees establishment	X											
National steering committee meeting	X	X	X	X	X	X	X	X	X	X	X	X
Sites steering committees meetings	X	X	X	X	X	X	X	X	X	X	X	X
Management plans formulation					X	X	X	X				
Legal status establishment for the 3 reserves			X	X	X	X						
Plan for community participation				X								
Biodiversity evaluation in the 3 sites			X	X	X	X	X	X				
Work plan site 1		X										
Work plan site 2		X										
Work plan site 3		X										
Enclosures for endemic in situ conservation				X	X	X	X					
Legal measures for management plans adoption					X	X	X	X	X	X		
Traditional best practices workshop							X					
Local committees forums		X	X	X	X	X	X	X	X	X	X	
Training on grazing areas & dune stabilization					X				X			
Women integration workshop						X				X		
Protected areas management & monitoring process							X					
workshop												
Environmental communication training workshop									X			
Study tours to the 3 sites				X			X			X		X
Biodiversity assessment process workshop				X								
Concepts to combat desertification workshop				X								
Public awareness campaign				X	X	X	X	X	X	X	X	X
Electronic information and communication process			X	X	X	X	X	X	X	X	X	X
Didactic material elaboration				X	X	X	X	X	X	X		
Liaison bulletin				X			X				X	
Endemic flora conservation						X	X	X	X	X	X	
Water mobilization							X	X	X	X	X	
Project evaluation workshop				X				X				X
Project audits				X				X				X