

## GLOBAL ENVIRONMENT FACILITY

### Proposal for PDF Block B Grant

<b>Country:</b>	Chad
<b>Focal Area:</b>	Biodiversity
<b>Operational Programme:</b>	Arid and semi-arid ecosystems, including land degradation
<b>Project Title:</b>	Participatory Conservation in the Manda National Park / Moyen-Chari region, south-eastern Chad
<b>GEF Funding requested:</b>	US \$ 261,360
<b>Cofinancing:</b>	US \$ 30,000 (French FEM)
<b>Total PDF Funding:</b>	US \$ 291,360
<b>Expected full project Funding:</b>	US \$8,500,000 (French FAC, CARE, Saudi Fund for Development, Republic of Germany, UNSO, UNDP, GEF)
<b>Block A Grant Awarded:</b>	No
<b>Block B Grant Awarded:</b>	No
<b>Requesting Agency:</b>	UNDP
<b>Duration of PDF:</b>	8 Months (from May 1998 to December 1998)
<b>Council Submission:</b>	April 1999

#### SUMMARY: PROJECT OBJECTIVES AND DESCRIPTION

1. The objective of this PDF project is to develop and implement a participatory programme of biodiversity conservation in the Manda National Park / Moyen-Chari region of south-eastern Chad. Identified as a priority area in the developing National Biodiversity Strategy, the national desertification Action Plan, and the emerging Strategic Action Plan for the Lake Chad Basin, the area supports biodiversity of global significance in the form of one of only two remaining natural areas of transition between the Sahelian and Sudano-sahalian regions of central Africa. Currently samples of this biodiversity are protected within the Manda National

Park and the Aouk and Nyala Reserves. However, these areas are under increasing pressure from agricultural expansion, both subsistence and commercial (cotton), from transhumant grazing pressures, and from the interactions between all of these in an area subject to increasing land degradation and desertification. The project seeks to alleviate these pressures by developing sound participatory management regimes, based on optimal resource exploitation and management which draw on lessons from both ICDP's and CBNRM activities elsewhere, throughout the Moyen-Chari region.

### **Summary of problem**

2. The Moyen-Chari region in southern Chad constitutes one of the few remaining undisturbed ecological zones of Sudanese savannah. The region includes: (a) the Manda National Park, (b) the Aouk reserve, and c) the Nyala reserve. These zones together contain a variety of biotopes and ecological niches, including dry forests, savannahs with Sudano-Guinean vegetation, floodplains, seasonal and permanent lakes, and grassy hilly regions.

3. The variety of ecotopes include a rich array of biodiversity, the more well known being large mammals such as the derby eland, elephant, buffalo, defassa waterbuck, roan antelope, korrigum, hartebeeste, giraffe, lion, leopard, hippopotamus, and patas monkey.

4. The Sudanese savannah is under severe pressure throughout the sub-Saharan region as a consequence of expanding human populations demanding more land for agriculture coupled with sedentarization of pastoralists, and increasing numbers and demands of transhumant herds moving southward from the advancing arid Sahara interface. These pressures are now placing the biodiversity of the Moyen-Chari protected areas under immediate threat.

5. These direct threats can be elaborated as: continuing use of traditional systems of production which consume large amounts of natural resources, increasingly shortened fallow periods for land, extensive rather than intensive cultivation patterns, and overgrazing. These problems are compounded by continuous conflict between sedentary farmers and transhumant cattle farmers who compete for available resources; sub-optimal land use patterns; encroachment on protected areas for farming and cattle pasture; demands by neighbouring communities for rights including fishing in permanent bodies of water, engaging in ritual and customary practices, gathering dead wood, and collecting medicinal plants and straw within protected areas; extensive use of bush fires by poachers and the absence of controlled burning in the traditional land use management system; and use of protected zones as transhumance corridors.

6. Without urgent changes in the current use patterns of natural resources in the Moyen-Chari region, the loss of biodiversity and the depletion of this unique Sudanese savannah ecosystem will soon reach irreversible proportions. It is of critical importance to preserve a genuinely protected zone in order to preserve the local, regional, national and international

benefits of the Moyen-Chari. Such a protected zone would also be linked to surrounding sustainable natural resource use systems including corridors for migration and transhumance, intensified agriculture in the region, and participatory and integrated systems of planning and management for the entire region.

### **Objectives of the full-scale project**

7. The full-scale project will ensure the conservation and sustainable use of the Moyen-Chari region's biodiversity through an integrated programme of activities designed to protect biodiversity, control desertification, and advance agricultural and pastoral management systems in the areas immediately around the Manda National Park and its associated reserves.

8. The project will test the long-term viability of decentralized protected area management by local actors comprised of rural communities, professional organizations, and the private sector. Manda National Park has the advantage of a particularly favourable human environment because of the surrounding community's traditional interest in natural resource conservation and their strong cultural ties to the Sudanese savannah now under threat. The Manda National Park in particular is still used for various rituals linked to the Sara tradition including initiation ceremonies and the gathering of medicinal plants.

9. Project activities will focus initially on the Manda National Park and its immediate surrounds and then as working techniques are proven, be expanded to cover the entire Moyen-Chari region, including the Nyala, Aouk and other reserves. It should be noted that these will also provide ecological links and corridors through to similar areas in the northern parts of the Central African Republic and cross-border activities may be envisaged at some time in the future. This comprehensive regional approach will be instrumental in developing an action strategy consistent with national environmental action plans regarding desertification, biodiversity conservation, and sustainable development in Chad.

### **Activities**

10. It is anticipated that the full project will include the following activities:

#### **Activity 1: Improved Management of Protected Areas**

- introduction of new participatory and decentralized approaches to protected area regulation, management and planning that involve and address the needs and concerns of neighbouring communities;
- a shift from an exclusively protective approach to management to one where appropriate sustainable uses of natural resources are permitted; and

- enhanced management capacity.

### **Activity 2: Development of buffer zones and migratory corridors**

- buffer zones and appropriate management regimes will be negotiated and established with both neighbouring villages and the nomadic and transhumant pastoralists.
- in addition to formal buffer zones, wider zones of influence (as generally outlined in the MAB/UNESCO Biosphere Reserve concept) where local development activities such as improved management of cultivable and pasture lands will take place, will be defined and brought under sustainable management.
- migratory corridors for transhumants and their livestock will be negotiated and established in order to alleviate conflicts with both the protected areas as well as settled pastoralists and cultivators.
- a structure for negotiation, planning and management will be developed that includes local authorities, sedentary and transhumant communities, and others, as a model for the participatory, decentralized management and development of natural resources in peripheral areas.

### **Activity 3: Support and follow-up measures to ensure sustainability**

- information sharing, awareness promotion, and general improvements in communication between all partners
- development of mechanisms of accountability for all parties;
- establishment of ongoing training (active learning) activities for all programme participants;
- development and implementation of micro development projects;
- development and installation of participatory methodologies and mechanisms for monitoring the environment and providing feedback to all parties;
- dissemination of earlier experiences with previous programs; and
- establishment of a mechanism for broader exchange and communication with respect to environmental, economic and social changes amongst all the parties.

## **Support received and previous and current activities**

### France

11. Since July 1996, France has been the principal donor for the implementation of the International Convention to Combat Desertification in Chad. In the Manda National Park, French assistance has been largely directed toward "emergency" (rehabilitation of the main infrastructural works, such as the reconditioning of 250 pumps in 500 wells dug by CARE-Chad between 1988 and 1991). Institutional willingness to move toward a new approach to park management that involves a partnership between local populations and local government representatives has been tested.

12. Consistent support through small grants (Saudi Fund for Development, Food Aid Convention) has permitted the initial development of tourism infrastructure and, in particular, the increased community involvement in Park management. For example, community members from the district are employed on a quasi-unpaid basis alongside officials from the Ministry of the Environment to provide security for the Park.

### UNDP/UNSO/GEF

13. At the national level, UNDP and the United Nations Sudano-Sahelian Office (UNSO) participate in the Facilitation Fund (FF) for the preparation and implementation of the National Action Plan recommended by the International Convention to Combat Desertification. The region of Moyen-Chari falls within the framework of this National Action Plan.

14. The Global Environment Facility (GEF) provides funding for the development of the national strategy and action plan recommended by the Biodiversity Convention. Biodiversity conservation in the remaining Sudanese savannah regions of Moyen-Chari was identified as a national priority at the first national seminar on national biodiversity strategy formulation. GEF also provides support for the development of a comprehensive management strategy for Lake Chad's international waters, whose traditional basin encompasses the Moyen-Chari region.

### The European Union

15. The European Union has been providing support to the Zakouma National Park (PNZ) since 1989. The Zakouma National Park together with the Bar Salamat and Siniaka-Minia animal reserves constitutes another important element in biodiversity conservation for the Moyen-Chari region. Lessons from the Zakouma project will be fully incorporated into this project.

16. Other relevant projects include:

- A natural resource conservation and management project in Mayo-Kebbi funded by the Republic of Germany (approximately 2 billion CFA francs over a 12 year period). This project also provides funding for the protection of the Binder-Lere animal reserve;
- a project to support comprehensive management strategy development for the international waters of Lake Chad (see previous UNDP/UNSO/GEF section).

#### **DESCRIPTION OF THE PROPOSED PDF ACTIVITIES BY COMPONENT.**

17. PDF activities may be divided into three components that are linked directly to the full-scale project activities that are expected to follow. A fourth component concerns the preparation of the full project proposal to be submitted to the GEF for funding.

##### **Component 1. Improved Management of Protected Areas**

- rapid assessment of the status, distribution and management (both intended and unintended) of the various ecosystems, habitats and key species in the park area and its surrounds
- determination of priority management needs
- determination of the current legal, policy and jurisdictional status, boundaries and mandates of the protected areas, buffer zones, other land designations, as well as the various agencies, national and local authorities, institutions, communities, associations, NGO's, etc
- capacity assessment for protected area management – including central, regional and local institutions, agencies and groups

##### **Component 2: Development of Buffer Zones and Migratory Corridors**

- identification of stakeholder groups, their interests, structures and representational mechanisms, including national and local authorities and institutions, private sector, NGO's, development agencies, and sedentary and transhumant communities
- establishment of preliminary consultative mechanisms involving all stakeholders
- review and development of shared understanding amongst all players of the lessons learned in other Integrated Conservation and Development Projects (ICDP's), Community Based Natural Resource Management (CBNRM) activities, etc elsewhere, and also related projects and experiences in Chad itself

- surfacing of stakeholder interests, skills, natural resource use patterns, and economies
- shared agreement on list of priority issues, areas and problems and the approaches to be used in the project in addressing these and negotiating conservation and sustainable use zoning, patterns, agreements, etc.

**Component 3: Support and follow-up measures to ensure sustainability**

- identification of communication mechanisms and practises to be used
- shared definition of key parameters to be used in judging progress, including environmental, economic and social
- identification of training and other capacity needs
- definition of key development approaches and activities needed, together with modalities of operation for activities such as micro-credits, etc.

**Component 4: Detailed Project Preparation**

- donor consultations and a financing plan
- definition of project execution and implementation modalities
- preparation of full GEF proposal

**Execution and administrative support**

18. Project development will be managed by the Department of National Parks and Faunal Reserves (DPNRF) in the Ministry of Environment and Tourism (MET). A full-time national project coordinator will lead project development. She/he will be assisted by national consultants, experts from local NGOs, and international consultants as needed. The coordinator will receive essential administrative and logistical support, including a secretary, lease of an office, a vehicle and a computer etc.

**ELIGIBILITY**

19. Chad signed the Biodiversity Convention on 12 June 1992 and ratified it on 7 June 1994. In order to meet its obligations under the Convention, Chad, with the support of the Global Environment Facility (GEF), is currently conducting the following operations:

- Development of the national action plan through a participatory process that includes national consultations; and

- Adaptation of the agreed national strategy and action plans to the national policy regarding the environment and sustainable development.

20. At the political level, the Government of Chad has clearly defined its political and strategic orientations in the fight against desertification, sustainable development, and other environmental issues in its Master Plan to Combat Desertification (PDLCD), adopted in February 1989. This political and strategic framework was ratified and readjusted at the 1990 Geneva III follow-up round table meeting on Chad (CS/E/LCD of November 1994). It is consistent with and complements the political guidelines in the field of rural development (sectoral consultations on rural development, food security and water resources held in December 1993), and the provisions, measures and recommendations of all international conventions on the environment which have been signed and ratified by Chad, including the Conventions on desertification, biodiversity, climate change, and humid zones of international value, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

#### **NATIONAL LEVEL SUPPORT**

21. The change to a participatory, integrated and decentralized approach to the management of the Manda National Park and the natural resources in its peripheral zones represents the implementation of environmental conservation and anti-desertification strategies which were decided upon during the Sectoral Consultations on the Environment and the Fight Against Desertification (CS/E/LCD), held in November 1994.

22. The extension of the project to other sites in the Moyen-Chari prefecture (i.e. Nyala and Hyrnan) and to the Aouk hunting reserves on the Central African Republic border, is a form of the regional integration recommended by the CS/E/LCD.

23. In Chad, the following organizations are responsible for environmental issues, the LCD, and sustainable development:

- The High National Committee on the Environment (HCNE) under the authority of the Prime Minister monitors and promotes the effective implementation of national policy. It determines the activity priorities between development and environmental conservation. Its management, coordination and execution organs are now being established.
- The Ministry of Environment and Tourism (MET), which is responsible for defining and coordinating the implementation of national policies. At the central level, the MET is responsible for the implementation of all projects related to the environment, including the conservation of biodiversity, the LCD and sustainable development.

## **JUSTIFICATION FOR A PDF REQUEST**

24. The Sudanese savannah of the Moyen-Chari is one of the last tree-covered habitats in this region of Chad. It constitutes not only a natural barrier that can help to contain the expansion of the process of desertification towards the south of the country but is also a major biodiversity reservoir of global significance. This tree-covered area of Sudanese savannah is used both as a transhumance corridor for cattle and for the migration of birds and wild animals. It is therefore important to preserve this Sudanese savannah, particularly the Manda National Park, with the introduction of a system of participatory and integrated management of the land in collaboration with transhumant cattle farmers and sedentary populations.

25. A national forum was convened in late 1997 with a mandate to define the objectives of the National Plan of Action (PAN) recommended by the Secretariat of the CI/LCD. In this Plan, the Government of Chad identified five to six pilot projects, or one to two in each ecological zone. The present project was included in this list of the country's priorities. The PDF will make it possible to better address both the ecological and socioeconomic problems of the region of Moyen-Chari and to formulate a request for funding of the additional costs of the Sudanese savannah region's biodiversity conservation.

## **OUTPUTS OF THE PDF**

26. The principal outputs of the PDF B will be:
1. a common understanding of the key environmental, institutional, economic and social organization and concerns of all stakeholders in the Manda national park area.
  2. a functional mechanism for consultation and discussion between all stakeholders.
  3. a full proposal for GEF funding as part of an overall project package to address the issues of sustainable natural resources management, controlling desertification, biodiversity conservation, environmental protection, and sustainable development, in the Manda national park region.

**ITEMS TO BE FINANCED**

<b>Description</b>	<b>Duration</b>	<b>GEF (US\$)</b>	<b>FFEM (US\$)</b>	<b>Total (US\$)</b>
<b>International Consultants</b>				
Consultant (International) – protected areas	3 mm	41,000	4,000	45,000
Consultant (International) – participatory management	2 mm	24,000	6,000	30,000
<b>National Consultants</b>				
Project Coordinator	7 mm	21,000		21,000
Consultant – legal	2 mm	6,000		6,000
Consultant - rural sociology	4mm	12,000		12,000
Consultant - economist	3 mm	9,000		9,000
Consultant – agronomy & rural dvpt.	3 mm		9,000	9,000
Consultant – pastoral ecosystems	2 mm	6,000		6,000
<b>Workshops/Consultations</b>				
Consultations, meetings and workshops involving the different actors in the zone, donor round table, etc	ongoing	73,000	11,000	84,000
<b>Materials and Operations</b>				
Materials and reproductions of reports, documents, bibliographies, maps, etc.	ongoing	15,000		15,000
Supplies, rental of office space, communications, vehicle, computer, admin support, etc.	ongoing	35,000		35,000
<b>Agency Support Costs</b>				
UNOPS	ongoing	19,360		19,360
<b>TOTAL (US \$)</b>		<b>261,360</b>	<b>30,000</b>	<b>291,360</b>

## SUSTAINABILITY

27. The sustainability of the activities to be carried out during the PDF and the full-project stage is assured by the fact that there is or will be:

- A strategy for action that will identify and limit the recurrent costs associated with the post-project functioning of the system;
- The introduction of participatory local management based in particular on objectives which have been determined in consultation with the local communities and which address short-, medium- and long-term concerns;
- Strong traditional and patrimonial attachment to the park (benefit derived from its existence) and a growing awareness of its ecological value which help to sustain rural activities; and
- The proximity of Sahr (20 kilometres away), the third largest city in the country, and the gradual restoration of means of communication and traffic should help to promote the national and international development of the second national park of Chad, as well as of the other protected zones that are integrated in the regional and multi-focal approach. The management modalities which would have been put in place will encourage a collective organization of this development and a sharing in its benefits.

## **Annex 1: Description of the Manda National Park**

The preservation of this environmental block, which is located in a highly anthropogenic milieu, depends on the willingness of the neighbouring communities to safeguard this important element of their cultural patrimony. For the local populations, the Manda Park is a place where rituals linked to the Sara tradition (initiation ceremonies, gathering of medicinal plants) are practised.

Covering an area of some 114,000 hectares, this former regional animal reserve (1951), which later became a territorial animal reserve (1953), was upgraded in 1965 to the Manda National Park. It is located 27 kilometres north-west of the city of Sarh (capital of the prefecture of Moyen-Chari) and approximately 475 kilometres South of N'Djamena. The vegetation is a tree savannah of the Sudano-Guinean type. The botanical diversity of this area which, despite being relatively small contains a rich variety of biotopes (dry forests, savannas, floodplains, seasonal and permanent lakes, hills, etc.), in itself justifies the need for protection and development.

The Manda National Park has no water supply problem. Water is supplied not only by the Chari and the Bahr Sara, which are permanent rivers that form its natural boundary, but also by a series of lakes situated in the central area. These lakes, which are of large size and many of which are permanent, are fed by the overflow from the Chari River. They play a crucial ecological role for land animals for which they provide water and high quality pasturage when the water level is low and for aquatic birds and fish.

Birdlife in the Manda Park is abundant and diversified. More than 70 species of birds have been identified. These species range from the ostrich to passeriformes and include birds of prey, palmipeds (web-footed birds), limicolae, etc. This diversity is the result of the variety of habitats that are represented in the park: permanent and seasonal bodies of water, rocky massifs, floodplains, wooded savannahs and light forests.

The significant fisheries resources constitute for professional fishermen their principal source of income. For crop farmers, cattle farmers and sedentary or semi-sedentary crop and cattle farmers, fishing complements their crop and cattle farming activities and represents a significant and immediate source of income. These activities suffer less than agriculture and cattle farming from the vagaries of the climate which is extremely variable and unpredictable in the country.

Prior to the prolonged drought and to the events of 1979, the fauna of the Manda National Park was rich and diversified. Despite its relatively small area in comparison with the other national parks, the diversity of environments and the presence of permanent bodies of water made the Manda National Park home to an abundance of varied fauna. It was noted in

particular for its populations of derby elands, the largest and now one of the rarest antelopes of Africa, hippopotamuses, elephants, buffalos, korrigum, defassa waterbuck, ostriches and warthog. The occasional lion could also be found as well as leopard, Roan antelope, hartebeeste, kudu (here at the most north westerly extent of its range), and other varieties of antelopes and giraffes. Three species of savannah monkeys (the dog-faced baboon, the slender long-tailed African monkey and the red-tailed monkey) were also common in the park.

During the events of 1979, surveillance in the park became much more lax. Some farmers attempted to install themselves in the park, herds of cattle penetrated into it during their descent towards the south in the transhumance that followed the drought and poaching became widespread. This situation led to the near total disappearance of all large and medium-sized animals, particularly hoofed animals.

Although the density of the existing fauna is relatively low, it appears that, given the potential for their development (good plant cover) and the motivation of the population, local authorities and custodians, this density could be gradually increased if adequate measures continue to be taken to implement a plan of management that is adapted to the local situation. It has also been reported that a herd of elephants on the move is about 60 kilometres east of the Manda National Park. These populations, coming from the Zakouma/Siniaka Minia/Lake Iro ecological zone or from the Melfi region could reach the Manda Park and thrive there if the conditions required for their sustenance could be restored. Emphasis should be placed, in this connection, on the importance of the Bahr Salamat which could once again play the role of migration corridor which it had originally played, thereby permitting exchanges of fauna between the different protected areas.

Four cantons have varying degrees of interest in the Manda National Park. These are: Djoli, Niellim, Balimba and Kokaga. The first two, situated respectively in the south west and north of the park, are much more affected by the problems posed by proximity to a protected area because of the large area which the protected zone occupies in their territory than are Balimba and Kokaga, which are situated in the south and south-east of the Park, which occupies only a small portion of the host territory. According to the survey which was carried out in April 1993, the population of these four cantons totalled 12,953.

## **Annex 2: Geographical and socio-economic description of Chad**

By reason of its geographical location at the crossroads of West and East Africa and of the desert and preforest savannahs, the territory of Chad is rich in biodiversity. Even though the country has only a limited network of protected areas (concentrated mainly in the region of Moyen-Chari) it nevertheless constitutes an important element for the maintenance of the African Continent's biodiversity.

The territory of Chad encompasses three different geographical zones: (1) a desert zone which covers the northern half of the country, including a mountainous belt towards the north-east border regions; (2) a savannah region in the southern part that is approximately 400 kilometres wide; and (3) a transition zone some 350 to 400 kilometres wide that covers a central belt of territory running in a north-south direction. The climate is very different between these three regions. In the North, the climate is Saharan, i.e., very dry, while in the South, rainfall is abundant (700-900 millimetres) with more than 100 days of rainfall per year on average. The transition zone has a typical sahelian climate, with a rainy season from July to September and a dry season the rest of the year.

With a Gross Domestic Product (GDP) of US \$220 (1992), Chad is ranked among the poorest countries of the world.

The share of agricultural production in its gross domestic product is between 30 and 35 percent and this economic sector provides work for more than 80 percent of the active population. Industrial production is not very developed. It accounts for approximately 20 percent of GDP and it should be noted that many industries are also connected with agriculture. If one takes into account the fact that cattle farming represents approximately 14 percent of GDP, it becomes clear why the country's economy experiences severe variations from one year to the next, depending on the vagaries of the weather.

In comparison with agriculture and cattle farming, it is difficult to appreciate the contribution of the environment to the national economy, although there seems to be a great degree of economic dependence on natural resources. It is believed that 90 percent of domestic energy sources in Chad originate in its forests. Fishing represents ten percent of GDP and arabic gum ranks third in export earnings.

In Chad, more than 60 percent of the national territory, particularly in the North, is seriously affected by desertification.

While it covers only approximately ten percent of the national territory, the Sudanese zone includes half of the cultivated land of Chad and is thus the main agricultural region of the country. The monetary economy is heavily dependent on the growing of cotton, which is the principal source of revenue for more than 80 percent of the agricultural farms in the region.

# REPUBLIQUE DU TCHAD

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Le Responsable du Point Focal Politique

à

Monsieur Mohamed T.El-Ashry  
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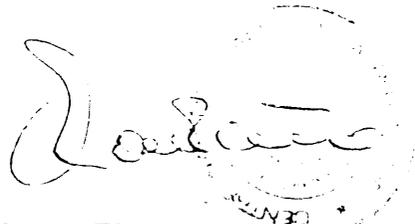
Monsieur le Secrétaire Exécutif,

J'ai l'honneur de vous demander de bien vouloir examiner la proposition du document du Projet ci-joint pour un éventuel financement sur fonds PDF bloc.

L'objectif du projet est de jeter de nouvelles bases d'une approche participative de gestion et de protection de la biodiversité du parc National de MANDA.

En espérant que ce document de projet retienne votre attention, je vous prie d'agréer Monsieur le Secrétaire exécutif, l'expression de mes sentiments les meilleurs.

Le Directeur



BABA EL-HADJ MALLAH