

PROJECT FULL DESCRIPTION

AGENCY'S PROJECT ID: 836

COUNTRY: Chad

PROJECT TITLE: Conservation and sustainable use of biodiversity in the Moyen-Chari

GEF AGENCY: UNDP

DURATION: 6 years

GEF FOCAL AREA: Biodiversity

GEF OPERATIONAL PROGRAM: 1

GEF STRATEGIC PRIORITY: 1

ESTIMATED STARTING DATE: November 2003

Title:	Conservation and sustainable use of biodiversity in the Moyen-Chari
Duration:	6 years
Implementing Agency:	United Nations Development Programme (UNDP)
National Executing Agency:	Ministry of Environment and Water
Cooperating Agency:	UNOPS
Requesting Country:	Chad
GEF Focal Area:	Biodiversity
Programming Framework:	Operational Program 1: Arid and semi-arid ecosystems

SUMMARY

Manda National Park (MNP), located in southeastern Chad, was declared a National Park in 1965, and is one of the last wildlife refuges in the Moyen-Chari. Since that time, globally significant biodiversity at MNP has experienced periods of relative quietude as well as times of substantial anthropogenic disturbance. Currently, vegetation at this 114,000 ha. biodiversity haven remains in relatively good condition, though wildlife populations are continuing to recover slowly from a period of extreme poaching during Chad's late 1970's – early 1980's Civil War. Continuing moderate levels of disturbance are threatening this recovery. Under the baseline scenario, this disturbance would almost certainly continue, and could potentially lead to irreversible degradation.

The GEF alternative would demonstrate a long-term shift in current unsustainable practices within Moyen-Chari by focusing on the MNP and its associated landscapes. It would ensure the conservation and sustainable use of MNP and its immediate surroundings while demonstrating the use of wildlife corridors as a technique for rehabilitating and maintaining the biological diversity of southeastern Chad. This immediate objective would be achieved through the following specific outcomes: (i) MNP would operate according to well-functioning and adaptive systems – including staffing, regulatory, ecological and compliance monitoring systems and sustainable use protocols – that were designed and implemented through a participatory management planning process; (ii) Residents of surrounding communities and migratory pastoralists would place significantly less pressure on MNP's natural resources, while concurrently playing an active and participatory role in MNP's conservation, rehabilitation and related planning, and; (iii) One or more wildlife corridors would function in support of the rehabilitation of MNP

wildlife and in maintaining ecological connectivity between MNP and nearby wildlife-rich areas (why are these areas rich while Manda is impoverished?).

COSTS AND FINANCING (US\$):

GEF: Project Brief:	\$1,400,000
Block-B Preparatory Funding	\$261,360
Sub-total GEF:	\$1,661,360

Co-financing:

European Union (Zakouma)	\$350,000
UNDP Chad	\$500,000
France	\$640,000
CARE International	\$100,000
Government (in-kind)	\$45,000
Totals	\$1,635,000

TOTAL PROJECT COST (excluding Block B preparation cost): **US\$ 3,035,000**

ASSOCIATED FINANCING:

Project name / description	Source of funding	Estimated amount of funding
Livestock –wildlife interactions	FFEM	\$2,400,000
Special Food Security Programme	FAO	\$690,000
Various community development initiatives in Moyen Chari	Swiss co-operation	\$500,000
TOTAL		\$3,590,000

GEF FOCAL POINT ENDORSEMENT:

Name: Mr. Oualbadet Magomna
Date: 5 February 2003

IMPLEMENTING AGENCY CONTACT:

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Acronyms

APICA	Association for the Promotion of African Community Initiatives (<i>Association pour la promotion des initiatives communautaires africaines</i>)
APRODEPIT	Association for the Promotion and Development of Integrated Pisciculture in Chad (<i>Association pour la promotion et le développement de la pisciculture intégrée au Tchad</i>)
CCDL	Canton Committee for Local Development (<i>Comité Cantonal de Développement Local</i>)
CCDP	Park Development Coordination Committee (<i>Comité de Coordination du Développement du Parc</i>) (Manda)
CFPA	Centre for Agricultural Training and Promotion (<i>Centre de Formation et Promotion Agricole</i>)
CFPR	Centre for Rural Training and Promotion (<i>Centre de Formation et Promotion Rurale</i>)
CNAR	National Centre for Research Support (<i>Centre National d'Appui à la Recherche</i>)
CURESS	Conservation and Sound Use of Sudano-Sahelian Ecosystems (<i>Conservation et utilisation rationnelle des écosystèmes soudano-sahéliens</i>)
DPFPN	Directorate for the Protection of Fauna and National Parks (<i>Direction de protection de la faune et des parcs nationaux</i>)
ECOFAC	Conservation and Rational Use of Forest Ecosystems in Central Africa
FAO	Food and Agriculture Organization of the United Nations
FFEM	French Global Environment Fund (<i>Fonds français pour l'Environnement Mondial</i>)
FSD	Special Development Fund (<i>Fonds Spécial de Développement</i>)
GEF	Global Environment Facility
GIS	Geographic Information System
HCNE	National High Committee for Environment (<i>Haut Comité National pour l'Environnement</i>)
IDB	Islamic Development Bank
IUCN	International Union for Conservation of Nature
LEAD	Livestock Environment and Development Initiative
MEE	Ministry of Environment and Water (<i>Ministère de l'environnement et de l'eau</i>)
MNP	Manda National Park
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-governmental Organization
ONDR	National Office for Rural Development (<i>Office National de Développement Rural</i>)
PDF	Project Development Facility
PSSA	Special Programme for Food Security (<i>Programme Spécial pour la Sécurité Alimentaire</i>)
TPR	Tripartite Review
UN	United Nations
UNDP	United Nations Development Programme

1. COUNTRY OWNERSHIP

1 a Country Eligibility

1. Chad ratified the Convention on Biological Diversity (CBD) on 30 April 1993 and is eligible for technical assistance from UNDP.

1 b Country Drivenness

2. The project's objectives, strategies, and activities are consistent with key national and sector development plans, policies, and strategies as outlined below in **Table 1**.

Table 1: Linkages Between Project and National/Sector Plans, Policies & Strategies

Specific National/Sector Development Plan, Policy, or Strategy	Project's Consistency with National/Sector Development Plan, Policy, or Strategy
Chad's constitution of 31 March 1996 and subsequent policy statements provide an overall <i>mandate for decentralization</i> , which continues to be put into practice. Its emphasis is on ensuring widespread public participation in the management of community affairs and development. Thus, Article 48 of the Constitution requires that "the State and the decentralized territorial communities must ensure the protection of the environment".	The project supports the goals of the decentralization process by demonstrating, and promoting the replication of, a decentralized strategy of protected area management, particularly involving local communities and NGOs.
<i>National Biodiversity Strategy and Action Plan</i> (NBSAP) adopted by Government through Decree 198/PR/MEE/00 of 9 May 2000 does not identify specific priority sites, but: (i) notes the importance and biological richness of Chad's Sudanian zone; (ii) highlights the threats to biodiversity and their underlying causes in the Sudanian zone; (iii) notes the poor relations between local populations and many protected areas in the country, and; (iv) defines within its logical framework a set of five results	The project: (i) is located within the nationally important Sudanian zone, in and around one of Chad's two national Parks; (ii) addresses many of the threats to biodiversity and underlying causes identified in the NBSAP; (iii) aims at demonstrating a sustainable approach towards improving relations between local populations and protected areas, and; (iv) will support achievement of each of the five results identified within the NBSAP's logical framework.
<i>Chad's Rural Development Strategy</i> , presented to development partners during a sectoral follow-up meeting to the Geneva IV Round Table Conference of October 1998 includes environmental issues as one of four major areas of concern.	The project will directly support one of the four main objectives of the rural development strategy, i.e., restoration and protection of ecosystem processes, particularly problems linked with human activities.
<i>The Convergence Plan for the Conservation and Sustainable Management of Tropical Forests in Central Africa</i> originated at the First Summit of Central African Heads of State, held on this matter from 12 to 17 March 1999 in Yaoundé which resulted in the commitments set forth in the Yaoundé Declaration.	The project supports several of the priority actions identified in the plan, including: reinforcing actions aimed at increasing rapid participation of the rural population in the sustainable management of ecosystems and reserving adequate space for their socio-economic development; taking measures to harmonize actions for forest ecosystems and other sectoral programmes, including reforestation, transportation and agriculture; implementing concerted actions aimed at stopping large-scale poaching and any

Specific National/Sector Development Plan, Policy, or Strategy	Project's Consistency with National/Sector Development Plan, Policy, or Strategy
	other unsustainable use of biodiversity resources in the sub-region by involving all stakeholders, in particular economic operators and the population.

1 c Endorsement

3. The project has been endorsed by the GEF Operational Focal Point in a letter dated 5 February 2003– see **Annex 8**.

2. PROGRAM & POLICY CONFORMITY

2 a Program Designation & Conformity

4. The project's emphasis on strengthening protected area management and on demonstrating the integration of biodiversity conservation criteria into land use management within the surrounding productive landscape – in this case within a biological corridor connecting two protected areas – is consistent with the objectives of Operational Program 1, Arid and Semi-Arid Ecosystems. The project follows an ecosystem approach based on identification of the driving forces controlling the status and trends of biodiversity in the project area. It incorporates the main OP objectives of conservation and sustainable use, works within areas of priority national interest and emphasises the importance of replication. Outputs reflect those called for in the OP, including: improved PA management; removal or mitigation of key threats by addressing their underlying causes; integration of biodiversity within sector policy; enhancement of sustainable use, and; institutional strengthening.

5. While the GEF is still in the process of defining its emerging directions in biodiversity under GEF-3, the project has been designed with the latest draft report on this subject in mind. In particular, the Strategic Priority I will be supported, by **catalysing sustainability for protected areas**. The project aims to establish the capacity for such sustainability at the level of one protected area. This is seen as the first step in creating an enabling environment. The project aims to *develop capacity for long-term sustainability*, with emphasis on institutional, managerial and individual capacities in MNP and its surrounding areas,. In addition, *local communities and community-based organizations* will play an important role in project implementation, as well as benefiting from the development of alternative sustainable livelihoods, including the dissemination of methods for sustainable use of economically important natural resources.. Through its innovative approach towards ensuring sustainable use in a corridor between Manda and Zakouma, the project will also contribute to the conservation of biodiversity in a wider network of protected areas. Finally, the project will contribute to an activity that would synthesize lessons learnt for policy and regulatory formulation regarding the protected area system as a whole at the national level. This initial effort is focused primarily on capacity building and demonstrating innovative approaches. It is envisaged that later efforts will directly address the issue of sustainability of protected areas in Chad.

2 b Project Design

2 b i. Sector issues, root causes, threats, barriers, etc., affecting global environment

Environmental baseline

The protected area system of Chad covers two national parks (Manda and Zakouma), integral nature reserves (Fitri), wildlife reserves (Abou Telfane, Bahr Salamat, Binder-Léré, Fada Archei, Mandelia, Ouadi Rimé-Ouadi Achim, and Siniaka-Minia), and several classified forests. The government has also enacted legislation regulating hunting, extraction of forest products, and fishing. The proportion of Chad's territory under formal protection thus approaches international norms, with 113,890 km², or 8.8 % of the total territory, being under protection.

Moyen-Chari

6. The prefecture of Moyen-Chari, in southernmost Chad, has a Sudano-Guinean climate, with the highest average rainfall of any of Chad's prefectures (900-1350 mm). The dominant vegetation in the area is Sudano-Guinean wooded forest savannah. The natural conditions found in Moyen-Chari are highly conducive to a rich biodiversity. The region represents a point of meeting and convergence between biological species from the forest ecosystems and those from semi-humid and humid environments. Its Sudanian zones, particularly in its southwest where MNP is located, possess significant biological wealth. Major fauna resources characterizing the Sudanian biogeographic zone are well represented in the Moyen-Chari area (see Annex 6 for details). These include several red list species, among them several species of reptiles, such as the African grooved tortoise (*Geochelone sulcata*), the Senegal and Nubian flapshell turtles (*Cyclanorbis senegalensis* et *Cyclanorbis elegans*), large and dwarf crocodiles, pythons, monitor lizards (*Varanus exanthematus* and *Varanus niloticus*) and cobras (*Nadja nigicolis*).

7. In addition, the presence of a wealth of flora, initially recorded scientifically in studies made in the 1960s and 1970s, has recently been reconfirmed.¹

8. The protected areas in the Moyen-Chari include:

- ?? Two National Parks (Manda and Zakouma);²
- ?? Protected forest areas (Forêt classée and Forêt domaniale) at Djoli-Kéra, Hellibongo, Nyala and Hyman;
- ?? Fauna reserves (Réserves de faune) at Bahr Salamat and Siniaka Minia, and;
- ?? Protected hunting areas (Domains de chasse) at Aouk and Lac Iro.

Manda National Park

9. Located some 30 km northwest of the town of Sarh, MNP covers a surface area of 114,000 ha. It extends over nearly 85 km from Manda in the southeast to Niellim in the northwest on the N'Djamena-Sarh laterite road and is bordered in the north by the Chari River. It is surrounded by four cantons: Niellim in the northwest, Djoli in the northeast, Balimba in the south, and Kokaga in the southwest. It is also delimited in the west by the N'djamena-Sarh highway, in the east by the Chari River, in the north by the Niellim Mountains and in the south by the Bahr Sara. MNP is roughly located between 9°10' and 10°02' north latitude and 17°35' and 18°05' east longitude (see **Annex 7, Maps**).

¹ See O. Djimadoum (1998).

² Zakouma National Park is located on the border of Moyen Chari prefecture, in Salamat prefecture.

10. MNP contains a varied landscape, consisting of seasonal and permanent water masses, sandy plains, dry and humid valleys, lowland marshes, low cuirassed plateaus and hills. MNP is watered by the various branches of the Bahr Sara, a tributary of the Chari River, which makes access difficult during more than half of the year. It enjoys a Sudanian type of climate with yearly rainfall averaging 1,000 mm and yearly average temperature of 28°C with very high average relative humidity (63,3%). This climate has resulted in diverse natural plant formations ranging from dry grassland to gallery-forest and various stages of grass and tree savannah. These formations provide natural habitats to a diverse wild fauna. The floristic physiognomy of Manda Park also reflects soil diversity. In the Niellim Mountains to the north, soils are ferralitic. The area contains rugged landforms, with very steep slopes interspersed with dry or humid valleys. From the south to the north of the Park, the topography is characterized by very gentle slopes with sandy, hydromorphic to dry hydromorphic soils.

11. Because of its geographical location and mild climate, MNP is a site where species from the forests to the south and the Sudanian region to the north would normally converge. There are two types of ecosystem in MNP:

?? *A terrestrial forest ecosystem:* gallery forests, open forests and wooded savannas with some thorny species. According to the study of the fauna and flora population in MNP,³ the vegetation cover of the Park consists of three major strata: (i) wooded strata; (ii) shrub and bush strata and (iii) grass and herbaceous strata.⁴

?? *An aquatic ecosystem:* The mapping of the Park by the National Centre for Research Support (CNAR) in 1997 showed a total of 14 temporary ponds and 35 permanent ponds. They are located in the land subject to flooding along the left bank of the Chari River.

12. The diversity of habitats in the Park allows it to support a varied fauna population. However, Manda's wildlife populations were largely decimated during Chad's prolonged civil war. Fauna studies employing methods of estimating the presence of certain species have afforded an idea of the change in diversity of fauna in the Park from 1951 to 1996.⁵ There was a fairly rich variety of fauna from the 1950s until the 1970s. From the 1980s until the start of the 1990s, a very pronounced decline in the fauna population took place. Recovery became apparent in the mid 1990s.

13. In contrast to the condition of the fauna, the vegetation cover within the Park has not sustained major damage. Recent reports suggest that the various biotopes of the MNP ecosystems remain healthy, despite the virtually permanent presence of nomadic, semi-nomadic and sedentary pastoralists around and "illegally" inside the Park. The Park's healthy and stable flora is conducive to rapid reconstruction and restoration of fauna populations. From October 1999 to March 2000, monitoring missions inventoried the following species by identifying animal spoor and/or droppings or by vocalization:

- ?? Carnivores such as leopard
- ?? Ruminants such as giraffe;
- ?? Aquatic mammals such as the hippopotamus
- ?? Reptiles such as crocodiles, Nile monitor lizards and pythons *spp.*;
- ?? A number of bird species observed around watercourses;
- ?? Abundant fish resources, with the species remaining to be determined.

³ Kolmagne MALLAH NARÉ, 2000.

⁴ Analysis of the data from five transects (Manda, Sanguélé, Tallia, Koutou and Waïn) yielded knowledge of the most common plant species in the Park, which were inventoried and itemized in the course of PDF-B.

⁵ See **Annex 6**.

14. The decimation of big game and bushmeat in the 1980's and 1990's affected MNP more than other protected areas because of the close proximity of MNP to urban centers. Although statistics are not complete, it is thought that wildlife populations within the greater Moyen-Chari area remain viable and are of great potential importance to the eventual spontaneous recovery and long-term genetic health of MNP's fauna populations. These include in particular wildlife populations found within Moyen-Chari's numerous protected areas, but also wildlife located within the broader productive landscape that lies between and separates these areas.⁶ These can and do serve as important **biological corridors** for MNP. The continued ability of wildlife to thrive and to migrate among Moyen-Chari's protected areas and within its overall productive landscape will thus be critical to the ultimate rehabilitation and long-term genetic health of MNP wildlife populations. The global significance of this hot spot in the Moyen-Chari system (MNP, buffer and priority corridors) rests in the fact that it is one of the last refuges for wildlife in a rapidly changing sudano-sahelian region across Africa. Along with similar refuges provided by the W, Arly, Pendjari Complex and Niokolo Koba (both of which are currently supported through GEF funding), the conservation of the MNP and its associated landscapes will ensure a representativeness of biodiversity conservation across the African landscape..

Socio-economic baseline

15. According to the 1993 census, the Moyen-Chari prefecture has 738,595 inhabitants, with a mean population density of about 16 inhabitants/km². The vast majority of this territory's population consists of relatively homogeneous indigenous ethnic groups known as *Sara*. Other non-Sara groups (Niellim, N'dam and Gor) practice the same habits and customs. These various ethnic groups are heavily represented in the town of Sarh and its environs, including the Manda region. In 1999, the population census in the area covered by the National Rural Development Office (ONDR) for the eastern Sarh sub-prefecture, including the four cantons surrounding the Park, estimated the total population at 47,661 within 128 communities. A study on the population of Moyen-Chari in 1993 estimated the sedentary population at 96.6% (although this figure is probably less during the dry season when transhumance migrate to the region). Of the Sedentary population, 48.5% are young people under the age of 15, and there is a predominance of women (51.3%) reflecting the effects of the Civil War. The employed economically active (formal sector) population of Moyen-Chari is 55.0%, with economically active men (58.9%) being more numerous than women (51.4%). Population mobility indicators are high everywhere in the prefecture. Other groups of migrants from Biltine, Guéra and Chari-Baguirmi prefectures have also established themselves in Moyen-Chari. Land uses within the area are primarily for agriculture and pastoralism.

16. The ethnic groups that have long occupied the area surrounding MNP are the Niellim, the Tounia, the Toumak and the Sar or Sara (in agriculture) and the Hausa and Ngambaye (in fisheries). To these must be added certain groups of pastoralists who are becoming semi-sedentary and others seeking to adopt a settled way of life. There are many such transhumant pastoralist ethnic groups, including the Mbororo (native to the Chari-Baguirmi), the Foulate (coming from the Chari-Baguirmi), the Foulbé (from the Mayo-Kebbi), Dakara Arabs (native to the Guéra) and Mysériés and Wazinée Arabs (from Abougoudam).⁷ The multiple ethnicity of the area makes it imperative that the participatory approach of the project adequately ensures both an equitable sharing of benefits as well as equitable participation by all groups.

⁶ Data concerning wildlife populations and land uses within these corridors is being collected by a project supported by the French GEF (see para. 35 below).

⁷ Brown, Ellen Patterson. 1996. "Projet park Manda, situation socio-economique mai – juin 1996." Cited in Lawane 1999.

17. The population of this zone immediately surrounding MNP derives its livelihood from agriculture, fisheries, stock-raising, hunting and a little pisciculture (in ponds) and beekeeping (above all in the Koutou zone). The main export crop grown in this zone is cotton. In addition to growing rainfed cotton around the Park, the population cultivates primarily cereals, legumes and root crops. Cultivation methods are extensive, while fallow periods are starting to decline due to population increase. Most of the crop expansion is occurring in non-protected rangelands, although the potential for expansion into the park is always present. Many wild products are also present both in and around the Park; harvesting them makes a major contribution to family food supply and also earns substantial income for families.

18. To the west of the park, the population depends essentially on agriculture during the rainy season. To the east, on the other hand, the population lives essentially from fisheries. These fishing populations devote the greater part of their time during the dry season to fishing, and during the rainy season to cultivating certain plants such as cotton and cereals. During the dry season, some of them even enter the Park to fish in the permanent ponds.

19. Since the entry into force of the Park regulations in 1998, cultivation is no longer practiced in the Park.⁸

20. According to surveys and discussions on the ground in the cantons adjacent to the Park territory, the results of which are presented in a report on the legal characteristics of the MNP zone,⁹ *the surrounding populations are not on the whole opposed to the Park's existence*. They do not necessarily lay claim to the territory of the Park, which has been excluded from their ancestral heritage (decree 56/EFPC/65 and decree 243/PR/EFPC/PNR/67). However, they would like recognition of their rights to use the Park in a number of ways, such as: (i) cutting straw and certain timber species to construct their huts; (ii) traditional collective fisheries in the ponds in the Park along the lines of what was formally practiced between March and May of each year; (iii) the practice of certain traditional rites at ancestral sites – initiation rites, enthronement rites of traditional chiefs, particularly the land chief, and invocation of the gods at the start of the sowing, harvesting and fishing periods; (iv) harvesting of wild fruits such as Néré and shea nuts.

21. The populations dispossessed of their land do not appear to be still calling for the cash indemnities which they did not all receive at the time of the Park's creation (1965-1967), but rather appear to be favourably inclined towards the socio-economic activities being organized around the Park and view them as fair compensation. They would also like measures to be taken to keep away pastoralists who, they believe, destroy the environment and to limit over-exploitation of the ponds and waters by professional or occasional fishermen, some of whom use prohibited gear. They would also welcome better cooperation with the Park administrative staff and wardens in the interests of its conservation.

22. The perception of the pastoralists, as transhumant populations, has been described in a report on the pastoral ecosystems surrounding MNP.¹⁰ The pastoralists interviewed for this study acknowledged the Park's existence. They were unanimous, however, in not understanding either the justification for its existence or, above all, its usefulness. They felt that the Park was no different from other rangelands, and that consequently the resources to be found there constitute a common heritage available to all the communities that have traditional rights of access.

⁸Lawane, 1999.

⁹F. N. MAÏNGAR, April 1999.

¹⁰ Abdelmadjit M. SALEH and Laounodji DJAMBO. April 1999. "Parc de Manda: Ecosystèmes pastoraux." Report produced by PDF-B. Mimeo.

Legal and policy baseline

25. **Table 1** above provides information on the legal and policy baseline in the areas of environmental protection and conservation in Chad. In addition to those items mentioned in Table 1, the following aspects of the legal and policy baseline situation are worth noting:

- ?? *Act 14/PR/98 of 17 August 1998* defines general principles of environmental protection. Its overall objective is to establish the principles for sustainable management of the environment and its protection against any form of degradation in order to protect and make use of natural resources and improve the living conditions of the population;
- ?? The *Revised Forestry Code*, which is still pending adoption, is a law regulating forestry, fauna and fisheries. It is designed to ensure, in the context of Act 14/PR/98, management of forest, fauna and fish resources on a sustainable basis.

Institutional baseline

26. The National High Committee for the Environment (HCNE), established in 1995, is chaired by the Prime Minister and Head of Government. It brings together 16 Ministries with the goal of promoting, harmonizing and ensuring the implementation of sustainable environment and development strategies and policies. The specific tasks of HCNE are:

- ?? To ensure the effective implementation of recommendations aimed at sustainable development;
- ?? To ensure the implementation of Agenda 21 of the United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil, in 1992;
- ?? To ensure the effective integration of environment and development;
- ?? To guide sustainable development policies and ensure their proper implementation;
- ?? To arbitrate in the case of contradictory options between the priorities of development and of protecting the environment, and;
- ?? To mobilize the institutional and social partners in order to promote protection and improvement of the environment.

27. The Ministry of Environment and Water (MEE) provides the permanent secretariat for HCNE. It is the body that proposes and executes policies and strategies. It operates both through centralized and decentralized services. At the central level, the General Directorate coordinates and guides the activities of the technical department. It is decentralized into regional delegations, including one for Moyen-Chari. One of the technical departments – the National Parks and Fauna Reserves Department – is directly responsible for biodiversity. The Department is organized on the ground into Park and Fauna Reserve Sectors.

28. Finally, a number of national and international NGOs are active in the area of environmental management (see para. 35 below).

MNP management and regulatory baseline

29. MNP was established as a regional fauna reserve in 1951. In 1953, it became a Territorial Reserve initially to protect *Taurotragus derbianus*, the Derby eland. By decree 56/EFPC, it was made a National Park on 19 March 1965. Its status was later amended by decree 243/PR/EFPC/PNR of 23 October 1967. MNP is administratively under the regional delegation for the environment of Moyen-Chari and is the direct responsibility of the Head of the Southern Parks and Fauna Reserves Sector. This responsibility is exercised through three detachments based in Manda, Djoli and Wain; at a lower level,

the detachments have either a camp and/or a post. Thus the Manda detachment is supported by Kar camp and Guéré post; while the Wain detachment is supported by Koutou post and Wain camp.

30. The Park's human resources, insufficient in number (barely forty) in relation to the area they have to cover (114,000 hectares) and consisting of more than 60 per cent wardens, lack professionalism; even if their paltry salaries were to be increased, this will be a difficult shortcoming to remedy. The inadequate level of professionalism is reflected in major gaps in the preparation of the monthly activity reports and the filling in of monitoring and offence reporting forms. This state of affairs constitutes an explicit index of uncertainty in the monitoring of the Park's fauna population, for example. Lack of knowledge of either legal or regulatory texts governing their activities means that the wardens are aware neither of the seriousness of the offences committed by delinquents nor of the extent of the required penalties. In addition, other State employees and officials supervising the Park wardens appear unaware of the texts governing State lands, and specifically the protection of biodiversity. Participatory management will be possible only in a situation of trust, assurance and transparency, with a more responsible and professional Park administration that communicates validly with the surrounding communities.

31. The Park's infrastructure, comprised of buildings, camps and tracks, has been severely affected by age and by the many socio-political events that have taken place in Chad. The roads through the Park have not been remade since 1979, while the Wain and Kar camps have existed in name only since February 1998.

32. The Park Administration, without adequate resources or appropriate leadership, could not protect biodiversity effectively even if the legal framework were to be reformulated in the direction of more participatory and assured management of the Park.

33. Order No. 17/MEE/DG/DPFPN/98 of 23 June 1998 established the regulatory framework for MNP. It prohibits all activities within the Park – cultivation, grazing, hunting, collection of fruits, cutting of wood and straw, fishing, beekeeping and traditional rites. Article 3 of the Order enacting the regulations provides for a participatory administrative mechanism that comprises three committees:

?? *The steering committee* establishes multidisciplinary coordination among the different administrative units, defines guidelines within the Park and peripheral zones and formulates recommendations;

?? *The development committee* for the peripheral zones of MNP comprises representatives of various categories of socioeconomic actors present in the peripheral zone and of the local administration;

?? *The scientific and technical committee* consists of specialists in natural resource management, including the social disciplines. The committee may be requested by the steering committee, after consultation with the development committee, to conduct scientific and technical studies.

34. Despite the above regulatory framework, the above-mentioned committees have not yet been established because the MNP management lacks the necessary capacity for providing leadership in adopting a participatory approach to park management. This in turn has prevented the effective establishment of participatory management involving the local communities. Nevertheless, this remains an approach that could be pursued within a context of renewed cooperation.

Technical cooperation baseline

35. A number of recent and ongoing projects are relevant to the present GEF intervention. These include the following:

- ?? *Initiatives by French cooperation:* French cooperation has thus been the largest donor to MNP. Since 1994, it has been financing the project for rehabilitation and management of the Park through decentralized credit (CDI/1991), the Special Development Fund (FSD/1994) and the General Interest Assistance and Cooperation Fund (FAC-IG/1997) in the amount of 960,000 French francs. In 1998, the scope of assistance was increased and the budget was 80 million CFAF or around 12,137 Euros over two years, covering a number of activities, including park management and infrastructure improvement, awareness promotion and rural development. Execution was assigned to the NGO CARE International. Theoretically, this project ended in May 2001. Pending the effective start-up of the project on conservation of biological diversity in MNP, French cooperation initiated two small projects to maintain the progress made in rehabilitating the Park. These are the Park Support Project (300,000 French francs) and the Entrepreneurship Project (150,000 French francs) covering the period May 2001 – November 2002. The following are among the activities and results of this latest phase:
- The project rehabilitated 240 km of tracks, though they are already obstructed, and six watch towers; five camps did not last long and there is no accommodation. Ecotourism remains impossible under these conditions;
 - A conservation structure was rebuilt and currently comprises three detachments, at Manda, Djoli and Niellim, with a total of 38 wardens who are paid monthly salaries of CFAF 8,000, 15,000 and 18,000 depending on grade and equipped with bicycles, a good number of which are no longer in working order.
- ?? *The Zakouma Project:* Zakouma National Park (ZNP) is located approximately 75 km northeast of MNP and currently supports a large portion of the remaining wildlife found in the Moyen-Chari region. Unlike Manda National Park, Zakouma National Park has received very substantial financial support, in this case from the European Union. The first phase of EU support, entitled “Rehabilitation of Zakouma National Park,” had a budget of 1.6 million Euros and lasted from 1989-1993. The second phase, with almost three times the level of financing, or 4.2 million Euros, lasted from 1993-1997 and was followed by a transition phase utilizing special funds which lasted until 2002 and covered eco-development of the surrounding population. The third phase, entitled “Conservation and Rational Utilization of Sudan-Sahelian Ecosystems (CURESS),” which started in December 2002, emphasizes activities in support of the surrounding populations, with a major participatory action component. The amount of this latest package is 8.5 million Euros.
- ?? *The Pastoralism/Wild Fauna Interaction Project:* This is a project for integration of wild fauna and pastoralism under the LEAD initiative, the Chad component of which is financed by the French Global Environment Facility (FFEM). There was not really any cooperation between the activities in Manda National Park and those in Zakouma between 1989 and 2002. However, with the pastoralism/wild fauna interaction project financed by the European Union, it may be possible to contemplate activities relating to knowledge of wild fauna movements, especially the utilization of the area between Manda and Zakouma, which has been identified as an ecological corridor that could serve as a source of supply to MNP for species such as sassaby, water buffalo and elephant. The establishment of soil occupancy maps is of particular interest for monitoring the above species. Furthermore, the results of this project concerning the compatibility of wildlife and livestock production will be very useful and should be disseminated throughout the project.
- ?? *Initiatives by the Food and Agriculture Organization of the United Nations (FAO).* The FAO initiative involves implementation of the Special Food Security Programme (PSSA). The

objective is to bring about a rapid and sustainable increase in the production of basic food commodities through the use of water in irrigated systems, accelerated introduction of the available improved techniques, diversification of the sources of income of the rural population, strengthening of the organizational capacities of small farmers' organizations and systematic analysis of the constraints on sustainable development of production. In Chad, the FAO Technical Cooperation Programme (TCP) has financed the pilot phase of PSSA in the amount of US\$690,000. In Moyen-Chari, out of the seven communities covered by PSSA activities, four are in the peripheral zone of MNP. There are Maïrom, Hélibongo, Balimba and Djoli. It should be noted that the diversification component of PSSA has supported beekeeping activities in four communities around the Park, namely Djoli, Nangda and Nguéré I and II with the participation of the NGO Care Chad. The pilot phase of PSSA yielded very encouraging results. Accordingly, FAO made use of its 1997 cooperation agreement with the Islamic Development Bank (IDB) to formulate a proposal for support to PSSA/Chad which will entail full-scale implementation of the pilot phase on the national level in order to step up the activities.

?? *Initiatives by NGOs and operators:* The operators directly involved in the management and conservation of MNP are those which are financed by French cooperation. In chronological order, they are the Italian NGO ACRA and CARE Chad:

- (i) *ACRA.* This NGO began implementing the project for rehabilitation of MNP in 1995. The activity report identified three main types of achievement in the context of this project in 1997, the date on which the execution contract ended. They were: (a) Rehabilitation and Management of the Park; (b) Assistance in the socio-economic development of the peripheral zone; (c) information, awareness promotion, empowerment, education, training, studies and research;
- (ii) *CARE CHAD.* This NGO has been active in Moyen-Chari for more than 15 years. Since 1999, it has been the main operator in the Park Rehabilitation and Management Project, following the departure of ACRA. Its action centered on revitalizing the Park (rehabilitation of infrastructure, equipment for the wardens, supply of materials) and support for surrounding communities (beekeeping, pisciculture, forestry). This project was renewed in May 2000. On the basis of its experience on the ground, the NGO CARE Chad is expected to be a key operator in the present GEF project.

?? *Initiatives by Swiss cooperation:* Historically, the initiatives of Swiss cooperation stem from the experience of Swiss volunteers at the start of the 1960s. These led to the establishment of the Centres for Agricultural Training and Promotion (CFPA) and later the Centres for Rural Training and Promotion (CFPR). These training activities led to the creation of the self-managed markets which are today being operated by ONDR and COTONTCHAD. Since 1994, Swiss Cooperation has continued along the same lines, pursuing specifically the objectives of training and follow-up of trainers and protection of the environment (hunted species and hunting, fishing and aquaculture, silviculture and land management). Swiss cooperation relies on two structures, namely the pilot training centres (on the ground) and the Health and Environment Support Bureau (BASE) based in N'Djaména. Swiss cooperation's partners in Moyen-Chari are local NGOs such as the Association for the Promotion of African Community Initiatives (APICA) and the Association for the Promotion and Development of Integrated Pisciculture in Chad (APRODEPIT). A number of communities adjacent to the Park, such as Hélibongo, are benefiting from Swiss cooperation activities. Swiss cooperation allocates an annual budget of around 500,000 Swiss francs for development initiatives.

36. These experiences directly affecting MNP have shown that there is a need for a concerted approach to improvement of Park Management. Ad hoc, small-scale interventions are not capable of maintaining momentum and their impact is quickly lost. There has been too much reliance on a limited number of park personnel, with little capacity, and no efforts to supplement this capacity by involving local people in providing both labor and decisions. NGO interventions have been de-linked from government decision making structures, resulting in government assuming that all is well and paying less attention to MNP. The GEF intervention in MNP and its associated landscapes is aimed at leveraging this baseline towards a coordinated intervention that will have lasting impact on biodiversity conservation and sustainable use in the Moyen-Chari.

37. The Zakouma and MNP projects will together strengthen the two most important PAs in Moyen-Chari. MNP will gain valuable lessons from Zakouma on the enhancement of tourism revenues, while Zakouma will gain lessons on integration of pastoralism into PA management. The FFEM project will provide basic models for use by both projects on integration of wildlife and livestock in the corridors. The WB/GEF IEM project currently under preparation will eventually assist in strengthening the national enabling environment, through building capacity of MEE agents, and rationalization of the land tenure system. Together these separate but coordinated initiatives will enhance the sustainability of biodiversity conservation actions in Chad

Threats, causes and barriers baseline

38. The baseline scenario shows that faunal populations and diversity in MNP have declined as a direct consequence of excessive poaching, and their spontaneous regeneration, although theoretically possible, is hampered by continuing (albeit relatively low) levels of poaching. Furthermore, natural reconstitution from neighboring landscapes is hampered due to fragmentation of the habitat in the corridors and buffer zones.

39. This section considers the various cause-effect relationships that underlie the above-defined problem. It considers: (i) proximate causes, i.e., direct threats; (ii) intermediate causes, and; (iii) root causes. A concluding sub-section considers **barriers** which, while not always having a direct cause-effect relationship with the above factors, nevertheless constitute the 'enabling environment' within which individual causes, and thus the overall problem, persist.

40. PROXIMATE CAUSES / THREATS: Major proximate causes, or direct threats to Manda's biodiversity, include actions taking place at three geographic levels: (i) within MNP itself; (ii) within cantons surrounding MNP, and; (iii) within the broader landscape of protected and unprotected lands in the Moyen-Chari region. Another way of classifying the threats is by their degree of urgency; i.e., some threats (e.g., poaching) are particularly urgent in the short-term, while others are of a more long-term, erosive nature. The following description of threats will include an attempt to characterise these threats according to the above variables.

?? **Poaching (Le braconnage animal)**, both within MNP and at the broader geographic levels mentioned above, is among the significant and urgent pressures hindering the full rehabilitation on MNP's ecosystem. Within MNP itself, intermittent and episodic poaching continues, with the use of throwing knives, arrows and firearms. Some of this activity is believed to be associated with other 'illegal' uses of the Park. Thus, transhumant pastoralists and local people who are grazing livestock, or gathering fruit or other resources may be taking wildlife as a profitable sideline to their other activities. Animal poaching is said to have even attained the status of a network of tracks known as "poachers' tracks". Similarly, hunting at the broader landscape level, which is largely uncontrolled, is preventing currently reduced or extirpated species from reaching

and repopulating MNP. The Bégou district of Sarh, bordering on Kokaga canton and adjacent to the Park, is said to support a significant market for game.

?? **Extensive methods of agriculture:** Agricultural practices remains extensive and its itinerant nature gives rise simultaneously to deforestation and soil degradation. The result is that the overall landscape of the region shows a marked distinction between the relatively well-vegetated Park and its completely human-dominated peripheral region. Thus the Park becomes a potential alternative source of satisfaction of the need for new and fertile land. Fortunately, recent instances of fields being cultivated within the Park itself are rare, based on records of offences from 1992 to 1999.¹¹ Therefore this process represents a potential, long-term, threat to MNP's sustainability.

?? **Transhumant and sedentary pastoralism:** In recent years, there has been a rapid increase in the numbers of transhumant livestock in Moyen-Chari, which rose from 118,000 cattle and 127,000 small ruminants in 1972 to 498,000 cattle and 185,000 small ruminants in 1993.¹² Transhumant pastoralism is perceived by Park officials as a source of serious and constant concern, but its impact varies depending on the number of livestock involved, the duration of their stay and their concentration in the Park zone, which in turn are dependent on the quality and quantity of rainfall in the rainy season. A poor season may lead to a long stay and heavy concentration in the Park zone. The average duration is on the order of seven months (November to May). At the times when they are present, the semi-transhumant and transhumant pastoralists are to be found in all four cantons. The ethnic groups of pastoralists concerned are *Dakara and Missérié Arabs* in Balimba canton, and the same ethnic groups together with Foulata in Djoli canton. Over the period 1992 to 1999, most of the offences identified by the wardens responsible for monitoring the Park were committed by transhumant pastoralists introducing cattle into the Park. They do so in full knowledge of Park regulations, and because of not having any other option as their traditional rangelands are increasingly put under plow. Thus, the Park clearly exercises a strong attractive effect on transhumant pastoralism. However, there is little evidence of land degradation due to this type of grazing. While the extent of lands heavily affected by overgrazing appears thus far to be minimal within the park itself and may not yet be extensive in Moyen Chari as a whole – few statistics are available on this issue – nevertheless it can be a potential threat, if a system is not established to allow controlled and managed transhumant use of Park resources.

To the transhumant livestock must be added the livestock of the indigenous inhabitants, which are continually increasing in number and sometimes going to graze in the Park and increasing the pressure on it. While sedentary livestock farming is associated with the agricultural production system, this relationship has not yet attained the level of integration that permits sustainable utilization of resources from an agronomic standpoint.

In conclusion, whereas traditional agro-pastoral systems were finely tuned to their environmental circumstances, as well as capable of adapting to environmental change and remaining sustainable, recent changes are severely testing this capacity. Factors such as the privatisation of former pastoral land, and shifting horticultural lands for production of export crops, the expansion of areas of extensive agriculture and the establishment of protected areas are combining to limit grazing areas at the same time that herds are increasing. At some point, limits will be reached, unless ways are found to promote compatible uses of rangelands and Park resources.

?? **Use of natural resources:** This threat includes the following components:

¹¹ F. Maingar, 1999.

¹² Lawane, 1999.

- *Pressure from fishing* is felt on the east side of the Park and comes from the many professionals who frequently go to fish in the permanent and temporary ponds and in the waters bordering the Park, in addition sometimes using prohibited tackle or equipment such as “one-finger nets” or explosives. The populations engaged in fisheries are essentially non-indigenous (Ngambaye, Hausa) and sometimes indigenous (Tounia, Mboua, Sara Kaba, Niellim). Clearly, such fishing techniques are inappropriate and evidence of their use would indicate a high likelihood that unsustainable fishing is taking place.
- *Felling of timber and cutting of straw*: *Khaya senegalensis*, *Isoberlinia doka*, *Anogeissus leiocarpus*, because of their strength, are used for building house roofs and making canoes. Timber is felled to meet domestic energy needs (firewood and charcoal) cutting of palatable shrub species meets the food requirements of domestic sheep and goats. Logs and bundles of *Oxytenanthera abyssinica* are sent to the market to earn cash income. Straw is cut for the construction and rehabilitation of huts. Data is unavailable to indicate whether current use levels are unsustainable, but the potential clearly exists, exacerbated by a rapid depletion of such resources in surrounding areas.
- *Harvesting*. The population organizes clandestine harvesting in the Park. It involves picking bush fruits such as *Butyrospermum parkii*, used to make ointments and edible oil, the fruit of *Tamarindus indica*, *Parkia biglobosa*, and *Strychnos*, while the collection of tree leaves and honey satisfies family consumption needs and generates income. Pharmaceutical plants are also harvested. As is the case of timber felling and straw cutting, there are no clear indications yet whether such activities have already reached unsustainable levels, though clearly all represent disturbances to wildlife populations and carry with them the possibility of the kind of ‘incidental poaching’ referred to above.

?? **Bush fires** have the unique characteristic of being at one and the same time harmful and beneficial. The harmful bush fires are the uncontrolled or accidental bush fires caused by the carelessness of a pastoralist or agropastoralist adjacent to the Park or a passenger on board a vehicle travelling on the N'Djaména-Sarh road. It is also recognized that poaching is a source of uncontrolled bush fires. The bush fires that are useful / beneficial to the Park are controlled fires made by the Park administration to ensure visibility or regrowth of food plants for the Park's fauna. Good monitoring can reduce the uncontrolled and accidental bush fires, but above all the Park needs to be provided with a mechanism for combating them that is jointly managed by the surrounding populations in their joint interest.

41. INTERMEDIATE CAUSES: The above-described root causes underlie and feed into the following intermediate causes of biodiversity loss:

?? **Local people have few alternatives for fruit and firewood harvesting**: Local people, who are surviving on an average income of approximately \$0.50 / day, are able to partially meet their food and fuelwood needs through sources within MNP. For many people, these may represent the only, or least the most convenient, sources for obtaining these products. The alternative, of earning cash incomes and purchasing these products, is itself limited by poor access to capital or credit, high levels of rural unemployment, etc.

?? **Resource users have an incentive to maximize harvests**: In the absence of effective private or communal property rights, or some type of management structure that limits overall harvests, individual fishermen and other resource users have little incentive to limit harvests of common property resources, but rather face an incentive to maximize harvests.

?? **Pastoralists have few alternatives to using Park resources**: In the absence of effective private or communal property rights, and some type of management structure that controls and manages

crop expansion into rangelands, pastoralists, who are simultaneously confronted with dwindling rangelands, have no choice but to use Park resources.

?? **Local people and transhumants are not fully convinced of the legitimacy and usefulness of MNP and feel justified in continuing to utilize its resources:** In the beginning, when there were not as yet wardens and volunteers, the inhabitants around the Park regarded it as their property. Even the chiefs of the cantons sent the population to bring them certain products (fisheries, hunting, etc.) from the Park. Since the introduction of the forest wardens and Park volunteers and the entry into force of the Park regulations, the surrounding populations have come to understand that they have been excluded from the Park and that it is no longer their property, but rather that of the State. This sense of “exclusion” has led to increasing tension and “illegal” incursions.

?? **Biodiversity conservation has a low priority, particularly outside of protected areas:** Clearly, in Chad’s extremely difficult economic conditions, biodiversity existence values are not likely to impact on people’s decisions. People are aware of the reduction in the population of certain species (e.g. bushmeat) but find it easier to get substitutes (e.g. livestock meat) rather than grapple with developing sustainable use regimes when the land tenure and Park regulatory frameworks work against such communal efforts. For Government also, which has very limited budgetary resources, biodiversity conservation must often take its place behind other more urgent priorities. As a result of these factors, land use planning does not incorporate biodiversity considerations. It should be noted that, despite some effort at Zakouma National Park, there has been little success thus far in generating ecotourism revenues in Chad, which could otherwise have helped to affect both community and government decision-making and priorities.

42. ROOT CAUSES: The following are among the key root causes of biodiversity loss at MNP:

?? **Political instability and a weak Government** may be said to lie at the heart of MNP’s present difficulties. It was in the context of Chad’s civil war that much of the loss of fauna populations took place. The central Government’s ability to project authority remains weak in many parts of the country, partly due to very limited budgetary resources. As a result, management structures are only capable of controlling the tip of the iceberg of infringements, usually the ones more easily monitored, such as crop expansion and illegal hunting with guns.¹³

?? **Poverty** remains a crushing burden on the people and environment of Chad. Living in one of the poorest countries in the world, Chad’s people are obliged to take all measures at their disposal to ensure their short-term survival and that of their families, even when such actions, through their environmental impacts, threaten the long-term sustainability of their natural resources.

?? **Population growth** in Chad is extremely high, often outstripping on an annual basis increases in economic growth and thus leading to net falls in per capita income. For example, the Moyen-Chari region has an estimated 2.4% annual population growth rate.¹⁴ From the standpoint of population density, Moyen-Chari is one of the prefectures where density is very high: according to the 1993 population census there are 16.4 inhabitants/km²; in the rural sub-prefecture of Sarh comprising the four cantons surrounding the Park, the density is 11.6 inhabitants/km², corresponding to an area of 17,850 km² and a population of 198,113 inhabitants. The urban pressure on MNP comes from the town of Sarh, located some 30 kilometres away, whose population in 1993 was 79,850 inhabitants. The proximity of this growing town constitutes a recognized threat to the Park in terms of satisfaction of essential food needs, but above all for the supply of domestic energy.

43. BARRIERS: The following barriers provide the enabling environment in which the above-defined threats are able to proceed largely unabated:

¹³ This problem is also considered as a barrier, see para. 41 below.

¹⁴ Monnery, Sylvie. 1997. “Gestion communautaire et participative du PNM.” Cited in Lawane 1999.

- ?? **Local management capacity barriers:** MNP staff are poorly trained, poorly motivated and poorly equipped, and as a result compliance monitoring is limited and ineffective. This barrier is linked to a number of factors including poorly trained and unmotivated staff, limited technical know-how and equipment, etc. Management capacities of local community-based organizations are likewise limited.
- ?? **Regulatory barriers:** MNP's current regulatory structure is rigid and uncompromising and encourages conflict with surrounding communities.
- ?? **Informational barriers:** Limited information exists concerning ecological changes and wildlife populations in MNP and surrounding areas. Also, policy-makers have limited information and awareness concerning the importance of these issues. Finally, local communities possess limited information regarding sustainable use.
- ?? **Institutional barriers:** There are no effective co-ordinating structures to ensure adequate land-use planning in areas surrounding MNP, particularly in potentially important biological corridors.

2 b ii. Project logical framework

44. The project logical framework with details on project objectives, outputs, activities, performance indicators, risks and assumptions are described in **Annex 2**.

2 b iii. Project goal, objectives, outcomes, and related assumptions, risks and performance indicators

Project goal and objective

45. The baseline, business as usual, situation is that the Park will continue to exclude farmers and pastoralists from using the resources inside the park, thus leading to greater tension and conflicts, increased threat to biodiversity of global significance, and greater forgone benefits and opportunity costs. The buffer zone around the Park, and the corridor to Zakouma National Park, will continue to degrade, as resource use remains unregulated. The GEF alternative will address immediate threats and remove barriers currently preventing the conservation and sustainable use of globally significant biodiversity in the Moyen-Chari. The EU sister project will continue to assist with the conservation and sustainable use of Zakouma National Park. The GEF project will focus on the MNP and its buffer zone. Global benefits are expected to accrue through the transformation of MNP into a welcoming haven for globally significant and other biodiversity, and a substantial reduction in direct threats is expected under this Alternative. Furthermore, park management capacities will be increased and the role of local communities will be significantly altered from the current negative role of threat source to a positive one of active participant in PA management and sustainable use activities. The corridor between Manda and Zakouma will be managed so that it can facilitate the rehabilitation of threatened animal populations, and in the long term, substantially reduce the genetic isolation facing these populations.

46. The project's **development objective**, to which it will contribute in part, is to ensure that the globally and nationally significant biodiversity of southeastern Chad is sustainably used by, and provides benefits to, current generations while being conserved for the benefit of future generations.

47. The **immediate objectives**, to which the project is committed to fully achieving, are to (1) ensure the conservation and sustainable use of Manda National Park (MNP) and its immediate surroundings (2) demonstrating the use of wildlife/livestock corridors as a technique for rehabilitating and maintaining the biological and genetic diversity of protected areas in southeastern Chad.

48. Compared with the baseline scenario defined above, ¹⁵ this **GEF alternative** is expected to lead to important global biodiversity benefits resulting from the stabilization and rehabilitation of MNP's globally significant and increasingly rare ecosystem in the Sudano-sahelian National- and local-level benefits will include rationalized sustainable use patterns for resources found within MNP, and enhanced micro-enterprise development opportunities associated with co-financing support in areas surrounding MNP . It is further expected that the project will generate useful lessons for management of other protected areas in the country, where similar global, national and local benefits may be expected to accrue.

Project Outcomes

49. In order to fully achieve the project objective, the project will undertake activities to produce the following project outcomes:

- ?? Outcome 1: MNP operates within a well-functioning, participatory management system
- ?? Outcome 2: Residents of surrounding communities and transhumants are using resources sustainably within MNP, and its buffer's natural resources, while obtaining benefits from sustainable development
- ?? Outcome 3: One or more wildlife/livestock corridors are functioning in support of the rehabilitation of MNP wildlife, in maintaining ecological connectivity between MNP and other priority protected areas in Moyen-Chari, and in support of sustainable pastoral management

Assumptions, Risks & Performance Indicators:

50. The project logical framework in **Annex 2** outlines the project's main assumptions, risks, and performance indicators related to the proposed project outputs and activities. The key indicators are:

- ?? Threat reduction indices show substantial (>60%) reduction in major threats facing MNP biodiversity by the end of the project;
- ?? Several formerly extirpated species have been recorded and are believed to be increasing to sustainable population levels, within MNP by the end of the project.
- ?? Increased reports of faunal presence along selected migratory wildlife corridors by the end of the project.
- ?? Sedentary and pastoral communities have benefited from the sustainable use and community development activities.

51. The key assumptions and risks are that Chad maintains political and economic stability; that Climatic changes are not overly disruptive during the life of the project; and that Government revenues increase from oil industry allowing sustainable financing of recurrent costs

2 b iv. Brief description of proposed project activities

52. The following is a brief summary of proposed project activities and their linkage to project outcomes.

Outcome 1: MNP operates within a well-functioning, participatory management system (GEF - US\$620,000; Other – US\$51,750)

¹⁵ See para. 36 above.

53. This outcome will be achieved through the following areas of activity:

- AA-1.1: **STAFF DEVELOPMENT:** The re-invigoration of Manda's staff represents a task which is essential for project success. This task will be ensured through a combination of reprofiling, retirement and staff recruitment, followed by development and implementation of a comprehensive staff training programme. Training will take advantage of existing facilities at national and sub-regional levels, through mechanisms such as joint training with the Zakouma project staff, and possible utilization of a regional training centre recently established in neighboring Cameroun. The training will cover wildlife management; range management; participatory co-management; community relations; and other topics.
- AA-1.2: **REGULATORY DEVELOPMENT AND IMPLEMENTATION:** The regulatory structure approved in 1998 requires a careful review and evaluation, following which a revised regulatory structure may be established. This process will include an early review of the three-Committee structure proposed, but never implemented, under existing regulations. If appropriate, these Committees will then be established and will help to guide the remainder of the regulatory revision process. Village-level participation in this process is considered essential to ensure subsequent co-operation.
- AA-1.3: **ECOLOGICAL MONITORING AND DATA MANAGEMENT:** While some useful baseline ecological data has been collected during the PDF-B process, more will be needed to establish a more comprehensive baseline. This baseline will be important for developing management strategies as well as for allowing comparison with data gathered during later stages of project implementation. Based on experience gained through the initial baseline data gathering process, a long-term ecological monitoring programme will be devised. It will be important for this programme to be compatible with other data systems being developed in Moyen-Chari and nationwide. The programme will also include the use of threat reduction indicators. Equipment will be provided to support the programme.
- AA-1.4: **PARTICIPATORY COMPLIANCE MONITORING:** While other activity areas are expected to help substantially reduce existing pressures arising from surrounding communities, it will nevertheless be important to strengthen existing levels of compliance monitoring. This will be accomplished through development of a detailed participatory compliance monitoring programme, along with provision of necessary equipment and related infrastructure improvements. Compliance monitoring will be participatory, i.e., local communities (both sedentary and pastoral) will be directly involved first in defining sustainable use levels, and then helping to prevent usage above these levels within MNP.
- AA-1.5: **PARTICIPATORY MANAGEMENT PLANNING AND IMPLEMENTATION:** Activity Areas 1.1-1.4 each involves aspects related to planning. Conclusions in each of these areas will be tied together to form a comprehensive management plan for MNP, a first version of which is planned to go into operation during Year 3 of the project. Additional activities beyond those identified in the present brief, including infrastructure investments, will be formulated and implemented under the auspices of this management plan. The management plan will also stipulate areas for sustainable use (link to Activity Area 2.4). Finally, the Management plan will develop appropriate mechanisms for equitable sharing of benefits with local communities, in the event that tourism revenues increase.
- AA-1.6: **LESSONS LEARNT FOR POLICY AND REGULATORY REFORM:** Based on the results of all project activities, the team will synthesize lessons learnt in order to feed into the national protected area systems, and revisions of policy and regulatory frameworks as required. This would include

cross-project learning and exchanges. In particular, focus will be placed on finding ways for government to place appropriate value on its protected area system, and to address its recurrent cost obligations. This would prepare the way for additional interventions (by both GEF and non-GEF resources) to catalyse sustainability of the protected area systems in Chad.

Outcome 2: Residents of surrounding communities and transhumants are placing significantly less pressure on MNP's natural resources, while obtaining benefits from sustainable development (GEF – US\$245,000; Other \$1,234,000)

54. Outcome 2 will be achieved through the areas of activity outlined below. Within each Activity Area, the special needs of transhumants due to their seasonal mobility, will be evaluated and explicitly addressed. It is important that transhumants gain as much from the project as local communities, otherwise an imbalance will be created that may lead to greater conflicts as a result of the project.

AA-2.1: COMMUNITY OUTREACH AND AWARENESS RAISING: Building on the process of village-level consultations launched under the PDF-B, a series of community outreach and awareness raising activities will be developed and implemented. MNP staff will work with community leaders to raise awareness concerning project activities related to conservation and sustainable use at MNP, as well as community development and micro-credit activities being supported through project co-financing. Villagers will participate in project planning, particularly in the selection and implementation of community development components. The project will aim to create a positive connection in local stakeholders' minds between the existence and continued effective protection of MNP and the availability of enhanced development opportunities, employment opportunities, sustainable use options, etc. This is expected to quickly change prevailing attitudes and incentives within local communities towards support for MNP and to encourage collective efforts to reduce or eliminate illegal activities emanating from their own or neighboring communities. Careful project monitoring will attempt to show the cause-effect relationship between development and threat reduction from individual villages and village clusters. Conclusions will feed back into project decision-making, allowing project strategies to be adapted accordingly.

AA-2.2: COMMUNITY PARTICIPATION IN MNP CONSERVATION AND REHABILITATION ACTIVITIES: Community participation and engagement in conservation and rehabilitation activities will represent a key component of efforts to win the community's hearts and minds to the cause of conserving MNP. Conservation and rehabilitation efforts, such as road clearing within MNP, will include part-time employment of community members in these tasks.

AA-2.3: PARTICIPATORY DESIGN AND IMPLEMENTATION OF SMALL-SCALE COMMUNITY DEVELOPMENT PROJECTS AND A MICRO-CREDIT PROGRAM: Various possible micro-projects for reducing pressures on MNP resources have been highlighted in background studies conducted under the PDF-B. These include community forest lots, intensification of agriculture through conservation farming techniques, intensive horticulture, well digging for pastoralists, development of alternative sources of fodder, domestication of medicinal plants, beekeeping, and appropriate fishing equipment. The project will conduct cost-benefit and environmental impact analyses of these interventions prior to funding them, to ensure that they match the Management Plan of Outcome 1. A micro-credit programme will be developed to provide seed funding for some of these small projects, and will be made available to all members of the community, making sure there is equitable access by women, different ethnic groups, sedentary vs. mobile populations, etc. This activity area will be supported with UNDP TRAC funds and French development co-operation.

AA-2.4: PILOT IMPLEMENTATION OF SUSTAINABLE USE PROTOCOLS: Another step in regaining community support for MNP involves allowing surrounding community access to some of the Park's resources on a limited and controlled basis. All such uses are currently banned, which has caused a good deal of resentment among these communities. Various alternative levels and types of sustainable use will be tested within specific identified zones of the Park in order to find the most acceptable trade off between people's and the Park's needs. This component will also develop protocols for sustainable use of the buffer zone and peripheral areas of the MNP, which will be integrated into canton development and regulatory plans.

Outcome 3 – One or more wildlife/livestock corridors are functioning in support of the rehabilitation of MNP wildlife, in maintaining ecological connectivity between MNP and its associated landscapes, and in supporting sustainable pastoral management (GEF - \$535,000; Other - \$350,000)

55. Outcome 3 will be achieved through the areas of activity outlined below.

AA-3.1: ECOLOGICAL DATA COLLECTION AND ANALYSIS AT THE BROADER LANDSCAPE LEVEL: Information on wildlife populations, together with land use data, will be collected for protected areas and the broader landscape of Moyen Chari. These areas represent the zone from which MNP's wildlife populations will need to draw in order to be successfully reconstituted and to remain 'connected' to a wider outside gene pool. Methods will include the use of aerial and satellite imagery and various methods of ground-truthing. Geographically referenced data will be analysed using GIS methods, permitting an improved understanding of wildlife populations and movements within the area and their relationship with land use and migratory transhumance patterns. In this way, the priority demonstration corridors will be identified. This Activity Area will be largely supported through the French GEF project, with additional targeted support from the present project.

AA-3.2: INSTITUTIONAL, MONITORING AND INFORMATION SYSTEMS DEVELOPED ALONG KEY MIGRATORY CORRIDORS: On the basis of information gathered under AA-3.1, the project will narrow its focus down to one or at most two priority migratory corridors, which will be targeted for demonstration. Within these areas, partnerships will be developed with local governments and stakeholders in the area, including particularly transhumants, and awareness raised on the concept of Corridor management. In an approach analogous to that being taken in the immediate vicinity of MNP, the support and participation of transhumants will be strongly encouraged.

AA-3.3: DEMONSTRATE METHODS FOR ENHANCING AND SUSTAINING THE EFFECTIVENESS OF WILDLIFE /LIVESTOCK CORRIDORS: This final activity area under Outcome 3 will involve the demonstration of innovative methods for enhancing the effectiveness of selected wildlife/pastoral corridors. The goal is to demonstrate methods by which MNP's wildlife populations can be rehabilitated and sustained over the longer term, by ensuring sustainable pastoral land management. Target species for rehabilitation via wildlife corridors include the sassaby, waterbuck, bushbuck and the elephant. The project will work within selected demonstration corridors with Zakouma Park officials, and local government (canton) officials on land use planning (capacity building and planning), as well as with local chiefs and transhumants, to develop and enforce access corridors for both livestock and wildlife. This may include minimal infrastructure development such as strategically located mini-dams/ponds and salt licks. It will also include establishment of conflict resolution mechanisms with sedentary farmers.

2 b v. *Global environmental benefits of the project*

56. MNP is at a meeting and convergence point for biological diversity from forest ecosystems and those from semi-humid and humid environments. Major fauna resources characterizing the Sudanian biogeographic zone are well represented in the Moyen-Chari area, but may soon disappear if concerted action is not taken to protect MNP as a wildlife refuge that would be restocked and revitalized from biodiversity sustainably used in the associated buffer and corridor zones. These include species endemic to but threatened in the sub-region, and several red list species.

57. Expected global benefits due to the project include the stabilization and rehabilitation of MNP's globally significant and increasingly rare ecosystem in the Sudano-sahelian. Flora populations and genetic assemblages will be conserved and, where appropriate, sustainably used. Fauna populations will be rehabilitated through conservation and sustainable development actions at three geographic levels: (i) within MNP; (ii) in areas immediately surrounding MNP, and; (iii) in biological corridors connecting MNP with fauna populations in neighboring protected areas and within the productive landscape. At this third level, the project will aim to secure long-term sustainable benefits by identifying and demonstrating methods for maintaining ecological corridors. It is only through action at all three levels that MNP's sustainability and continuing global significance can be ensured.

2 b vi. *Incremental Cost Estimation*

58. The process for jointly estimating incremental cost with in-country project partners involved consultations with Government, other partners active in the Baseline, and potential co-founders to determine their areas of priority and commitments. Conclusions of these discussions are presented in **Annex 1**. The Baseline costs are estimated at \$10,744,500. The Alternative will build on this baseline for a total cost of \$13,273,250. The increment is estimated at \$2,528,750. Of this increment, GEF is expected to contribute \$1,400,000, and other co-financing will be obtained from both baseline activities (government and donor activities that are essential for achieving the GEF objectives and are managed as an integral part of the same project) and new funding, for a total of \$1,635,000 in co-financing. The total cost of the project is therefore \$3,035,000.

2 c Sustainability

59. Biodiversity conservation requires sustainable solutions. It is meaningless to conserve species, habitat and genetic diversity for five or ten years, or even longer, only to have it lost subsequently. Thus, the ability to achieve benefits that are sustainable will be an essential barometer of project success.

60. The Government of Chad has demonstrated a substantial degree of commitment to goals of environmental protection, sustainable development and biodiversity conservation. A variety of significant measures have been taken in this regard, including adoption of the constitution of 31 March 1996, enactment of Law 14/PR/98 on environmental protection, and progress towards establishing a transnational protected area together with Sudan and CAR. These steps, among others such as the new laws on poverty reduction, have shown a significant degree of political will in these areas. Such political will is a necessary ingredient of sustainability, without which project gains would dissipate rapidly.

61. Despite the above, long-term sustainability will not be easily achieved. As noted below in the section on risks, any renewal of political instability could have the potential to quickly erase much of the progress made in recent years. Even assuming a stable political outlook, sustainability of the overall protected area

system remains a medium-term objective which the present project will only contribute towards but not fully achieve.

62. Institutional sustainability: The GEF alternative involves a one-time, appropriately scaled, investment to develop the technical, managerial and operational framework for effective management of MNP through an array of capacity-building activities. The project's strong emphasis on multi-stakeholder participation will also improve possibilities for sustainability. The project will build the capacity of government authorities and strengthen the enabling environment at the site so that frameworks and incentives are in place for the long-term management of resources.

63. Technical sustainability: The project does not rely heavily on international experts, but rather places emphasis on building the capacities of local experts. Thus, for example, the main long-term expert will be recruited on a retainer basis to provide part-time support throughout the project duration. This support will diminish over the course of the project.

64. Despite the current low levels of expertise in PA management, the project will emphasize the need to reach a minimum critical mass of national-level expertise for management of MNP by the time of project completion, thus substantially reducing the long-term needs for international expertise in PA management techniques at the site. However, this will need to be followed up following the project's completion by continued national-level training efforts to ensure that this capacity is maintained and extended.

65. Finally, combined with co-financing and associated financing from project partners, particularly the EU project at Zakouma, substantial progress is expected in the overall level of technical capacity of the PA system, including its HQ-based co-ordinating elements.

66. Financial sustainability: The project will avoid creating high-maintenance operational systems at the project site, but will focus on essential needs for conserving biodiversity. In addition, the project will liaise with the Zakouma /EU project to explore various mechanisms for sustainable financing, including ecotourism charges, etc., as a source of financing support to complement regular budgetary allocations.

67. Despite the above efforts to minimize the long-term costs to the Government of maintaining the PA system in general and MNP in particular, there will almost certainly remain a need for substantial increases in regular budget outlays to support a much heightened managerial presence at MNP. In this regard, the project has taken note of the present economic developments in Chad's oil sector, which are expected to dramatically transform the country's economy. Specifically, development of the Doba basin's three oil fields, production from which is expected to begin in early 2004, is expected to earn the country annual revenues of up to US\$200 million.¹⁶

68. The key to financial sustainability of MNP and of the PA system as a whole will be the extent to which these new revenues are mobilized for national goals of conservation and sustainable use, including protected area management. UNDP Chad, along with other donors, is already focused on this issue, having recently deployed a six-person team to work with key ministries, including MEE, on the development of project portfolios and related expenditure plans and to begin strengthening absorptive capacities.¹⁷ Similar efforts are expected to continue throughout the project period as UNDP Chad, together with Government and other project partners, work to ensure that oil revenues are wisely invested.

¹⁶ See www.eia.doe.gov/emeu/cabs/chad.html

¹⁷ MEE has already provide written assurance that Government co-financing levels can be expected to increase with the onset of the 'petroleum era.'

69. **Project risks:** The root causes of threats to biodiversity are shown in **Annex 3**. The major risk is that of persistence of the old habits of management on its own that have long characterized the administration of the Park. The adoption by the authorities of new guidelines in order to readjust the Park to participatory management supported by a firm will of the population to take an active part in the joint management process will serve to reduce the mistrust.

70. Climate variability is a constant factor. In the short run (i.e. the period of the project), it could destabilize the process of restoration of the ecosystems, resulting in less than impressive results and impacts of the project.

71. The political instability inherent in the maturity of African societies is a risk that needs to be closely monitored both at the micro-level of land holdings and at the regional and national levels. The process of decentralization to ensure participation in the democratic process is well-in-hand in Chad, and will be integral to all components of the project.

72. A final risk relates to the possibility that project benefits are captured by particular communities or by particular societal segments. It is expected that the framework for stakeholder participation established by the project will help to avoid this by creating a transparent decision-making process. However, the project will carefully monitor impacts, especially of component 2, to ensure the equitable sharing of project benefits along gender, ethnic and age lines.

2 d Replicability

73. The project will be in a position to provide important lessons learnt for participatory protected area management in Chad. Together with the sister Zakouma project, and the FFEM project, there will be models available for replication on how to integrate local communities in participatory management of a park; sustainable use regimes; and integration of wildlife and livestock in biodiversity conservation. The lessons from participatory management and sustainable development are expected to feed into the integrated ecosystem management project currently under preparation by WB/GEF. Furthermore, lessons learnt in engaging sedentary and pastoral communities in wildlife/land management around the Park, will be replicated to a few demonstration corridors. The concept of Corridor management is new to Chad and is expected to provide good demonstration effect, not only in the country, but also in the entire Sudano-sahelian region. Mechanisms to monitor replicability will be designed into the M&E plan.

2 e Stakeholder involvement

74. The baseline, business as usual, situation is that the Park will continue to exclude farmers and pastoralists from using the resources inside the park, thus leading to greater tension and conflicts, as well as greater forgone benefits and opportunity costs. The GEF Alternative will ensure that benefits accrue to local populations in four ways:

- ?? Controlled access/use in selected areas of the park
- ?? Employment benefits from infrastructure development and potential tourism
- ?? Participation in development of Park management plan, and therefore ownership of the plan.
- ?? Sustainable use and therefore improved productivity of buffer zones and corridors.

75. The project aims at generating a strong sense of commitment to biodiversity conservation and ownership over the management of biodiversity resources amongst a broad base of stakeholders. Broad-based stakeholder consultation and participation have therefore been integral to the project design process. During a first, extended consultation stage which took place during the PDF-B, a broad range of stakeholders was consulted, including: the administrative authorities (Prefect, Sub-Prefect, Mayor), the heads of the fauna and fishery sectors, MNP, the Inspector of Forests, ONDR, pastoralism, tourism by

NGOs, various associations and groups of fishermen, farmers and pastoralists directly or indirectly involved with the Park, park management and support committees, resource persons, the prefect delegate for environment and water. In addition, a number of meetings were held with the canton and village heads of the four cantons of Niellim, Djoli, Balimba and Kokaga.

76. The participatory process initiated under the PDF-B will continue under the full project. Stakeholder participation will occur at two levels: the project decision-making process; and implementation of project-related interventions.

77. Pastoral use of the park is subject to different interpretations: farmers want it prohibited (because it is competitive), park rangers do not understand that it can be potentially complementary to wildlife production; and pastoralists understand well that they can be compatible, and have no other choice but to use park resources. The project's challenge is to bring all these different stakeholders to a common understanding and vision on how to sustainably manage the natural resources while conserving globally significant biodiversity.

78. The bill regulating forest, fauna and fisheries (Act 14/98 of 7 August 1998) defines the general principles of environmental protection, with two basic principles that underlie the project's objectives, namely: (i) the principle of sustainability, which calls for rational, balanced and equitable management of resources, showing concern for the present and the future while preserving biological diversity; (ii) the principle of participation, which entails taking into account the views, needs and interests of all actors concerned.

79. In conformity with these new rules for participatory management of natural resources by the State and local communities, the implementation of the project will be based on a platform comprising a Coordination and Development Committee for Manda National Park. This will be a deliberative body involving all stakeholders in the Park. The Committee will be able to evolve in the long term in order to become an association for the development of the Park.

80. The cantons will participate in this Committee through their duly mandated representatives. These will be designated by election following deliberation in the General Assemblies of the Cantonal Local Development Committees (CCDL). These in turn represent community village development committees. The project will work with these structures to ensure that community development action plans and the cantonal development action plans expressly contain the commitments of the communities to sustainable exploitation of resources and the protection of MNP. The plans are of two years duration in order to permit the implementation of operations and their evaluation with a view to drawing up subsequent plans based on the prior experience and lessons.

2 f. Implementation arrangements

73. It is expected that the United Nations Office for Project Services (UNOPS) will be responsible for overall project implementation. In addition, a number of project Activity Areas, particularly those taking place under Outcomes 1 and 2, will be sub-contracted to the Chad offices of CARE International (at N'djamena and Sarh), which have long experience working in the Moyen-Chari region and at MNP.

74. A Project Management Unit (PMU) will be established at or near the project site (Manda or Sarh), with a small liaison office at N'djamena within the Headquarters of MEE. The PMU would be led by a National Project Director (NPD), who will be selected by a panel established for this purpose, with participation by the main project partners. Once selected, the NPD, with the technical and contract-issuing

support of UNDP Chad and UNOPS, will recruit PMU staff members, including a Deputy NPD and several support staff.

75. Responsibilities of the PMU, in association with the implementing agencies, will include the following:¹⁸

- ?? to provide overall project co-ordination, while acting as an independent and unbiased guarantor of co-operation and information exchange between the ministries;
- ?? to convene quarterly Project Implementation Meetings (PIMs) in order to review progress in implementing project workplans;
- ?? to ensure, together with the executing agency and UNDP, that specified tasks undertaken at the project site are outsourced to suitable consultants and/or sub-contractors through competitive bidding processes. This would include, for example, development of bidding documents and terms of reference, in co-operation with MEE, as necessary;
- ?? to organize project-level meetings and workshops, e.g., inception workshop, Project Steering Committee (PSC) meetings (see para. 73 below), etc.;
- ?? working closely with UNDP Chad, to co-ordinate all missions by international consultants, including preparation of terms of reference;
- ?? to develop, in co-operation with MEE as relevant, details of equipment procurement; and
- ?? to prepare overall project reporting.

76. The PMU will receive periodic support from an international Project Implementation and Monitoring Expert (PIME), who will carefully monitor and support the implementation of all project components. This expert will undertake periodic visits to the PMU and to the project site in order to review the progress of project implementation as compared with the defined baseline and with respect to the benchmark indicators highlighted in the Logical Framework Analysis Matrix (see Annex 2). The PIME will represent one way of introducing international best practices to the project site. PIME mission reports will follow an agreed format and will represent an important technical source for keeping the UNDP Chad desk officer, UNDP-GEF Regional Co-coordinator and UNDP-GEF Regional Manager apprised concerning developments in project implementation. Support from the PIME will gradually decline over the course of project implementation, e.g., from four months in Year One to one month in Year Six.

77. UNDP and UNDP/GEF together will provide both technical and administrative backstopping to ensure results-oriented management, proper administration of funds, maintain project accounts, facilitate staff recruitment and procurement processes, monitor resource mobilization of baseline and co-finance as contemplated in project document. Financial transactions will be subject to annual audits undertaken by internationally certified auditors.

78. A Project Steering Committee (PSC) will meet on an annual basis with the role of overseeing project planning, implementation and performance. It will consist of national and local-level representatives from each of the project partners. The PSC will be responsible, *inter alia*, for adopting annual work programmes prepared by the PMU.

79. Further details on the implementation arrangements will be negotiated and developed during the Appraisal phase, pursuant to GEF Council Approval of the Brief.

¹⁸ A complete TOR for the PMU, as well as for the PIME (see below, para. 70), will be appended to the UNDP project document.

2 g. Monitoring & Evaluation

2 g i. Incorporating lessons learned from similar projects

80. The lessons learned from other similar projects in Chad, in particular, the EU project at Zakouma, have been incorporated into the design of this project. Table 2 lists some of the main lessons.

Table 2: Lessons Incorporated into Project Design

Lessons Learned by Zakouma	Design Feature for MNP
A lack of awareness promotion and method. There was no awareness promotion/information programme with respect to either the conservation component or the rural development component.	The project will include significant elements for raising awareness among surrounding communities
Confusion between the Park and the project, despite the motivation of the leaders of the rural development component.	Clear development of roles and responsibilities between project staff and Park management staff, and development of an “exit strategy” for the project. The details will be developed during the Appraisal phase.
Good relations between the project and the neighbouring communities are highly dependent on the personalities in each (the project and the population) but also on the involvement and will of the authorities and the poor circulation of information with the populations and the various local authorities.	Efforts will be made to identify key communities where, due either to their ‘role’ as sources of threat or other problems, require supplemental efforts to ensure effective co-operation
The major lesson we can draw is that in Zakouma National Park the protection aspect prevailed over activities for the benefit of the population. The result was, of course, recovery of the fauna, but it did not fundamentally change the attitude of the population towards the Park.	This is something Manda needs to avoid if it is to ensure the sustainability of biodiversity. The project will focus on achieving a long-term and sustainable improvement in the ‘relationship’ between MNP and surrounding communities.
Ad hoc and small-scale interventions in the past decade to improving infrastructure and management of MNP have not resulted in sustainable impacts.	An appropriately scaled intervention, over a sustained period of time, and coordinated with government, bilateral donor and NGO efforts, is needed to set MNP management on the right footing.

81. The project is also designed to promote ongoing learning and adaptive management during project implementation through a systematized process of cross-project learning, particularly among the GEF-supported elements and co-financed elements at Zakouma and in the broader Moyen Chari landscape. This will involve identifying common thematic areas of project interventions and networking relevant projects around these themes. This task has already been initiated during the PDF-B phase and is reflected in the present project’s design. At project inception, all the relevant projects will jointly develop a plan and process for regular information sharing and communication on project methodologies and impacts. This process will contribute towards effective coordination and collaboration across multiple

stakeholders, programs, and projects in working towards common conservation and sustainable development objectives in the Moyen Chari region.

82. Cross-project learning linkages with other projects/programs operating outside of the Moyen Chari region, including work being undertaken by GTZ in Mayo-Kebbi and by Swiss co-operation throughout southern Chad will also be maintained. The PMU and UNDP will ensure effective documentation of all processes undertaken, lessons learned and successful initiatives. Information on successful experiences will be disseminated through networking arrangements from central to local levels to strengthen their support and ownership of the project initiatives. Information on successful experiences will be disseminated to other areas in Chad as well as to the general public and donors. The detailed M&E Plan will establish the specific budget for this activity.

2 g ii. Monitoring and evaluation during the main project

83. Monitoring and evaluation (M&E) of the Project will follow the UNDP Program Manual and GEF M&E procedures. The project will be subject to tripartite review (TPR) at least once every 12 months, the first such meeting to be held at the end of the 11th month from the start of implementation. UNDP-Chad will organize the TPR meetings. A project terminal report will be prepared by the Executing Agency for consideration at the terminal tripartite review meeting. It shall be prepared in draft sufficiently in advance to allow review and technical clearance by UNDP at least two months prior to the terminal tripartite review.

84. The Executing Agency will be responsible for ensuring the preparation of the harmonized Annual Project Report/Project Implementation Review (APR/PIR). This report is prepared and submitted to each TPR meeting at least one month in advance. Additional reports may be requested, if necessary, during the project lifetime. The APR/PIRs will be reviewed by the Project Steering Committee and shared with all project stakeholders. The activity reports must be submitted in advance to the Committee for Coordination for the Development of the Park (CCDP). The Cantonal Development Committees and the Community Development Committees will be informed through appropriate channels of the conclusions of the tripartite reviews. In addition, the National Project Director shall prepare and submit the quarterly project progress report to UNDP-Chad and the Executing Agency. During the first two years of the project, which are critical to its maturation, there will be six-monthly activity reports.

85. The project shall be subject to a mandatory final evaluation prior to its closure. The mid-term and final evaluations will be organized by the Executing Agency, in consultation with UNDP-Chad and UNDP-GEF. Both evaluations will be undertaken by independent evaluation missions with terms of reference and Team Leader(s) approved by UNDP-GEF. Participation by UNDP-GEF or the Executing Agency will be funded from resources external to the project budget. The review mission will, if possible, include representatives from co-funding donors.

86. UNDP-GEF will also monitor project performance, particularly in line with the indicators included in the Logical Framework Matrix (see **Annex 2**). UNDP-GEF will participate in TPRs issues raised in APRs and PIRs, and/or at the specific request of UNDP-Chad. UNDP-GEF will also supervise in the mid-term and final evaluations

87. Detailed biological and socio-economic surveys will be undertaken to provide a baseline for future monitoring and to provide a basis for adaptive management. In addition, field surveys will be sponsored during the life of the project to ascertain population trends for keystone species. A set of indicators of impact has been selected during project preparation and is provided in the log frame (Annex 2). Surveys will assess the social and economic impact of the project intervention and appraise social

relations and conflicts between different stakeholders and stakeholder perception of the project impact. The project team and Steering Committee will take corrective action where necessary, in line with the principles of adaptive management. The M&E component will also monitor the degree of replication of project impacts to other parts of Chad, primarily through monitoring changes in the national protected area system.

88. The total indicative cost of the monitoring and evaluation (M&E) component of the project is about US\$100,000. The project incorporates monitoring of biodiversity and socioeconomic indicators as an integral activity to track the performance and impact of project interventions and as a basis for adaptive management. This will be done in coordination and collaboration with other partner institutions. Comprehensive socioeconomic and biodiversity baselines will be established at the initial stage of the project. Periodic surveys on ecological and socioeconomic parameters will be undertaken subsequently to ascertain ecological, social, and economic trends. The project will ensure these ecological and socioeconomic parameters are closely linked to project interventions. Major project impact and implementation indicators to gauge the performance of project interventions have been developed (see Annex 2 for indicators of project objectives, outputs, and activities in the logical framework matrix).

3. FINANCING

3 a Financing plan

3 a i Project costs and disbursements

89. **Table 3** below provides a summary of the project costing and financing by project output

Table 3: Proposed Project Budget and Financing Scheme

Project Outcomes	TOTAL (US\$ Million)	GEF (US\$ Million)	Co-financing	
			Source	Amount (US\$) Million
1 – MNP operates according to well-functioning and adaptive systems – including staffing, regulatory, ecological and compliance monitoring systems and sustainable use protocols – that are designed and implemented through a participatory management planning process	\$0.671	\$0.620	Government	\$0.045
			France	\$0.006
2 – Residents of surrounding communities and transhumants are placing significantly less pressure on MNP and its buffer’s natural resources, while concurrently playing an active and participatory role in MNP’s conservation, rehabilitation and related planning	\$1.479	\$0.245	France	\$0.634
			UNDP	\$0.500
			CARE Int’l	\$0.100
3 – One or more wildlife/livestock corridors are functioning in support of the rehabilitation of MNP wildlife and sustainable land management in maintaining ecological connectivity between MNP and nearby wildlife-rich areas	\$0.885	\$0.535	EU	\$0.350
Totals	\$3.035	\$1.400		\$1.635

90. A financial plan with timing of disbursements is not applicable as this is not a phased project. The timing of disbursements will be determined at the project implementation phase.

3 a ii Confirmation of commitments by co-financiers

91. Letters of confirmation of co-financing will be provided at the time of submission of the Project Document, pursuant to GEF Council Approval, as required for CEO endorsement.

3 b Cost effectiveness

3 b i. Estimate cost effectiveness

92. This project has been designed to be cost-effective in the following ways:

?? Interventions related to institutional capacity-building are consciously designed to be undertaken with existing institutional structures and mechanisms. The project seeks to strengthen existing institutions and inter-relationships among critical institutions rather than establishing entirely new institutions.

?? A relatively modest full project is proposed, in line with the absorptive capacity of the site and country, and in complementarity to ongoing baseline activities

3 b ii. Alternative approaches considered

93. Originally, a significantly larger project was considered. Early drafts of the project brief aimed at a project with several million US\$ in GEF support, which would have targeted several of Moyen Chair's protected areas and several of its ecological corridors. However, this approach was rejected for a number of reasons, including in particular the government's limited absorptive capacity.

94. Another alternative that was briefly considered was to enlist the support of a private sector operator in managing the Park. However, this was quickly ruled out due to the weak state of the private sector in Chad and the limited current financial viability of the Park as an ecotourism destination.

95. Finally, another alternative considered for the rehabilitation of fauna in MNP was through deliberate introductions. However, this alternative was rejected in favor of the corridor approach, due to technical difficulties associated with such introductions, and to the fact that anecdotal evidence suggests that the corridor contains enough viable stock for spontaneous rehabilitation.

4. Institutional Coordination & Support

4 a Relationship with UNDP core programme

96. This project will contribute to achieving UNDP's Second Country Cooperation Framework (CCF) for Chad, which runs from 2001-2005. The project links closely with both thematic focal areas of the CCF, i.e., the fight against poverty and governance. In the area of poverty reduction, the project will support two of the CCF approaches, which are:

?? *Development of economic opportunities for the poor through support for self-employment and the promotion of private initiative:* The self-employment activities to be encouraged will represent contributions to combating poverty. UNDP will devote major efforts to training the officials of

savings and loans cooperatives (COOPEC) with a view to ensuring autonomous operation of the network whose establishment it supported;

?? *Initiatives to reduce vulnerability of the environment:* UNDP will support the development of energy resource management initiatives and strategies at the community level.

4 b Consultation, coordination and collaboration among IAs

4 b i. Relationship with activities of other IAs in the country/region

97. The project will liaise very closely with the GEF/WB regional project “Developing pilot schemes for integrated livestock and wildlife utilization in communal lands adjacent to protected areas in Africa”, primarily through the Chad component that is financed wholly by FFEM. Discussions have already been initiated during the PDF B phase of this project with the FFEM project staff, aimed at developing a common vision for the Moyen-Chari area. Furthermore, the FFEM project staff is expected to sit on the Steering Committee of this project. In order to avoid double-counting, the FFEM financing is not counted as co-financing for this project, although the FFEM project staff were very much willing to provide such a commitment as they saw direct linkages with the MNP project. The project will also liaise closely with the World Bank-GEF recent submission of a PDF B request for Community Based Integrated Ecosystem Management. Appropriate mechanisms will be developed as and when the PDF B commences implementation.

98. The project will also liaise with and extract lessons learnt from other projects in the GEF portfolio that are addressing the innovative corridor issues, such as the UNDP/GEF Mesoamerican Biodiversity Conservation project that worked at the broad planning, strategic level and was intended to support ground level activities only through support to a variety of intermediaries. The UNDP/GEF Talamanca-Caribe Corridor project in Costa Rica is another project that can provide lessons learnt as it worked towards a closer relationship to farmers in the corridor. Finally, lessons will be learnt from the UNDP/GEF project “Creating Protected Areas for Resources Conservation (PARC) in Vietnam Using a Landscape Ecology Approach”, in particular concerning the difficulties they have had in managing a corridor pursuant to government decisions to develop infrastructure in the corridor.

5. Response to Reviews

5 a Council

To be provided

5 b Convention Secretariat

to be provided

5 c GEF Secretariat

See revised section on sustainability (paras. 59-68) and revised STAP Review.

5 d Other IAs and relevant EAs

To be provided

5 e STAP Review

See Annex 4 A and B