

SECTION 2 - BACKGROUND AND PROJECT CONTRIBUTION TO OVERALL SUB-PROGRAMME IMPLEMENTATION

2.1 BACKGROUND AND CONTEXT - BASELINE COURSE OF ACTION

IMPORTANCE OF SAVANNA ECOSYSTEMS IN AFRICA

1. Savannas are found in more than twenty countries on four continents. The savanna biome covers approximately 20% of the Earth's land surface, between 18 and 23 million square kilometres, and is home to 500 million people. In Africa, savannas cover 40% of the continent, approximately 560 million hectares.
2. The vast majority of the rural populations in Africa live in savanna areas, which provide the bulk of food production. Consequently, for the foreseeable future, the inhabitants of Africa's grass savannas and savanna woodlands are likely to remain agriculturists and pastoralists and will thus continue to depend on the savanna for the provision of essential food, medicines, energy, building materials, and other resources.
3. These ecosystems are notable for their within-species genetic diversity, but also with significant biodiversity at species level of plants, animals and microorganisms. Arid lands species exhibit notably restrictive geographical distribution of species (endemism) and a wide range of morphological, physical, and chemical adaptations to their harsh environment. Biodiversity at landscape level is also high, providing critical wildlife habitats, especially for migratory species.
4. The six countries participating in the project are located in the West Sudano-Sahelian savanna biome and North Sudano-Guinean biome¹, which occupies a band across West Africa inland from the Guinean Forest biome. Relatively high human population densities (50 to 100 persons/km²) and a long history of human occupation characterise this region. West African savannas contain woodland areas with an understory of tall grasses, as well as shrubs and herbs. West Africa savanna is not particularly renowned for endemic or local richness of its fauna, especially in comparison with savannas in East and Southern Africa. It is better known for its endemic plants. Since the climate is tropical, but strongly seasonal, a significant migration of large vertebrates and birds occurs. The Sudano-Guinean savanna biome comprises a total of 105 Important Bird Areas (IBA). In Burkina Faso, Benin, Côte d'Ivoire, Mali, Niger and Senegal, 199 species restricted to the Sudano-Guinean biome have been recorded at the national level. A number of mammal species are threatened with extinction, and most of the remaining populations and savanna habitats are found in protected areas and in the six biosphere reserves of the project. Table One provides a summary of major ecosystems and biodiversity in each biosphere reserve.

¹ Corresponding to Udvardy Western Sahel biogeographical province and West African woodland savanna province.

Table One. Summary of major ecosystems and biodiversity in each biosphere reserve

Biosphere Reserve	Pendjari BR, Benin	Mare aux Hippopotames Burkina Faso	Comoé Côte d'Ivoire	Boucle du Baoulé Mali	Niokolo Koba Sénégal	Parc du "W" Niger
Ecosystems and habitat	Herbaceous savanna; woody and shrubby savanna; woodland savanna; open grasslands.	Open and gallery forests	Savanna woodland; open and gallery forest.	Wooded and bush savanna; <i>Butyrospermum paradoxum</i> savanna, herbaceous steppes and grasslands.	Herbaceous savanna; seasonally flooded grassland; dry forest.	Gallery forests, woodlands; scrublands; grasslands.
Birds and other vertebrates	<p><u>Avifauna:</u> Notable for large, conspicuous species such as <i>Anastomus lamelligerus</i>, <i>Ephippiorhynchus senegalensis</i>;</p> <p>20 of the 37 species of the Sudan-Guinean savanna biome have been recorded in Pendjari BR.</p> <p><u>Other Vert.</u> Various antelopes species (including African roan antelope); savanna buffalo (<i>Syncerus cafer aequinoctialis</i>), forest buffalo (<i>Syncerus cafer nanus</i>), and hybrid buffalo; elephants Mammals of global conservation concern include <i>Panthera leo</i>, <i>Damaliscus lunatus</i> and <i>Cephalophus rufilatus</i>.</p>	<p><u>Avifauna:</u> 243 species recorded, waterbirds species. <i>Microparra capensis</i>, <i>Treron australis</i> and <i>Apaloderma narina</i>.</p> <p>8 of the 32 species of the Sudan-Guinean savanna biome that occur in Burkina Faso.</p> <p><u>Other Vert.</u> <i>Hippopotamus amphibius</i>, <i>Loxodonta africana</i>, <i>Cephalophus rufilatus</i>.</p>	<p><u>Avifauna:</u> 494 species, including five species of global conservation concern: (<i>Circus macrourus</i>, <i>Falco naumanni</i> and <i>Gallinago media</i>; <i>Ceratogymna elata</i> and <i>C. cylindricus</i>. At least 26 of the 39 species of this biome known from Côte d'Ivoire have been recorded in Comoé BR.</p> <p><u>Other Vert.</u> Buffaloes, Hippotragues (<i>Hippotragus equinus</i>), Bubales (<i>Alcelaphus buselaphus</i>), Defassa waterbuck; Uganda kob.</p> <p>Of 54 species of larger mammals that occur, 21 are of conservation concern.</p>	<p><u>Avifauna:</u> 2 species characteristic of Sahel biome. 19 of the 35 species of this biome that occur in Mali have been recorded at this site.</p> <p><u>Other Vert.</u> Small herds of elephants, giant eland, hippopotamus, buffalo, Defassa waterbuck, Bubale major (<i>Alcelaphus uselaphus</i>), African warthog.</p>	<p><u>Avifauna:</u> 330 species. 23 of the 33 species of this biome that occur in Senegal have been recorded at this site. Two species of global conservation concern: <i>Marmaronetta angustirostris</i> and <i>Falco naumanni</i>.</p> <p><u>Other Vert.</u> Elephants, lions, antelopes, Uganda kob, Defassa waterbuck, crocodile, hippopotamus.</p>	<p><u>Avifauna:</u> 355 species of which at least 48 are intra-biome that occur in season migrants, 63 intra-African dry season migrants and 63 dry season migrants from Eurasia. Various aquatic habitats important for water birds. Key species include <i>Circus macrourus</i>. 21 of the 26 species of Sudan-Guinea Savanna biome that occur in Niger have been recorded at this site.</p> <p><u>Other Vert.</u> Elephants, lions, antelopes, Uganda kob, Defassa waterbuck, crocodile, hippopotamus.</p>

BIOLOGICAL SIGNIFICANCE AND CONSERVATION STATUS OF THE BIOSPHERE RESERVES

5. Six biosphere reserves were nominated to be part of this project by the respective countries. These sites have been selected along a gradient of biophysical and human cultural conditions: increasing aridity; increasing human pressure on grass savannas and savanna woodlands; and continuous land cover change from South to North. The project will focus on the following biosphere reserves: Pendjari (Benin); Mare aux Hippopotames (Burkina Faso); Comoé (Côte d'Ivoire); Boucle du Baoulé (Mali); Park du "W" (Niger); and Niokolo Koba (Senegal). The six biosphere reserves have been chosen with a view to enhance savanna conservation in a gradient from arid climate conditions (e.g. the Boucle du Baoulé Biosphere Reserve in Mali) to humid conditions (e.g. Comoé in Côte d'Ivoire). This will provide an opportunity to better understand savanna conservation and management problems under varied climate regimes.
6. Inherent to their international designation and recognition by MAB, biosphere reserves are recognised as repositories of globally significant biodiversity. Biosphere reserves are designed to contain protected "core" areas of representative ecosystems that have been recognised for their intrinsic and regional and/or globally significant value. These core areas also provide scientists and managers with the opportunity to understand ecosystem structure, functioning and dynamics, and to study the possibilities of managing these ecosystems in ways to improve biological performance while providing useful products and services. The ecosystems that are found in the core areas are, in general, resilient systems in complex equilibrium with biophysical driving forces, including episodic events such as extreme drought and extensive fires. These legally protected core areas are devoted mainly to biodiversity conservation, ecosystem monitoring and research (see annex 9H for schematic structure of a biosphere reserve).
7. These six biosphere reserves share a common legacy in that they were first established solely as national parks. Buffer and transition zones were established in a second step. The establishment and management of the biosphere reserves have resulted in limited conservation successes as these sites are still mainly managed as national parks without effective collaboration with local communities. As such, the reserve managers are challenged to balance the resource demands of local communities with the conservation imperatives of the reserve management plans. Socio-economic conditions, lack of access and clearly defined use-rights to natural resources have contributed to local communities compromising long-term environmental sustainability for the satisfaction of immediate needs, sometimes resulting in illegal exploitation of natural resources in the core areas. This longer-term threat to biodiversity within the six sites is compounded by the depletion of resources outside of the core areas, resulting in ever more pressure being placed on core and buffer zones as people seek available resources for their livelihoods.
8. Table One summarises basic biodiversity data of each biosphere reserve. In the paragraphs that follow key threats and constraints and barriers to effective reserve management are identified.

Pendjari Biosphere Reserve

9. Pendjari Biosphere Reserve (Benin) is located in Atakora province, Northwest Benin, on the international border with Burkina Faso and within the loop formed by the River Pendjari, 45 km north of Natitingou. It is composed of Pendjari National Park, Pendjari hunting zone, and Konkombri hunting zone and the total surface area is 623,000 ha.
10. Pendjari Biosphere Reserve lies within the Volta depression and contains a wide variety of herbaceous and woodland savanna habitats. It is characterised, in particular, by the diversity and richness of its fauna. Large mammals are present and easily visible, such as Uganda kob (Buffon), *Bubala major*, lion, elephant as well as forest and hybrid buffalo. The density of large mammals is relatively high compared to other areas of West Africa.
11. Predominant land uses in the biosphere reserve transition area are agriculture, trading of plant species, and pastoralism. The main conservation threats are transborder poaching, drought and lack of watering points, and bush fires. Conflicts with local communities are linked to the zonation of the biosphere reserve and access to natural resources within the biosphere reserve.

Mare aux Hippopotames Biosphere Reserve

12. Mare aux Hippopotames Biosphere Reserve (Burkina Faso) covers an area of 186,000 hectares and is located in Bobo-Dioulasso District in the west of the country, 80 km north of the town of Bobo-Dioulasso. The reserve is roughly oblong around a north-south axis, and lies between the Black Volta River and the Bossora/Bala highway. The Wolo River forms the southwest limit.
13. The biosphere reserve is composed of open forests rich in species with Guinean affinities and gallery forests along the watercourses. Migratory birds and hippopotamus are the main wildlife species. Avifauna is rich with more than a hundred bird species recorded with a similar number of fish species in aquatic ecosystems.
14. Predominant land uses are agriculture, livestock husbandry, fishing, hunting and plant collecting. Tourism is not well developed. The main threats to biodiversity and constraints to effective management are: a) lack of alternative incomes for local communities living in the vicinity of the reserve; b) poaching inside the core area; c) illegal fishing and wood cutting; d) lack of trained staff in the biosphere reserve for monitoring; e) abandonment of sound community practices such as protection of fruit trees; f) reduction of soil fertility; and g) the lack of a co-ordination structure in the biosphere reserve.

Comoé Biosphere Reserve

15. Comoé Biosphere Reserve (Côte d'Ivoire) extends from 35-km southwest of Bouna, in the northeast prefectures of Bouna and Ferkessedougou, westwards across the Comoé River to the vicinity of Kong. The Biosphere Reserve covers an area of 1,150,000 hectares.

16. The biosphere reserve contains a remarkable variety of habitats and plant associations found typically further south, including woodlands savannas, forests, and riparian grasslands. Large mammals include Buffaloes, roan antelope (*Hippotragus equinus*), hantebeeste (*Alcelaphus buselaphus*), common waterbuck, Uganda kob.
17. Major land uses are hunting, agriculture (cotton) and pastoralism. The main threats to biodiversity and constraints to effective management are poaching, the lack of infrastructure and adequate co-ordination to support integrated management of the biosphere reserve, and the lack of alternative economic activities and income sources for the local communities.

Boucle du Baoulé Biosphere Reserve

18. The Boucle du Baoulé Biosphere Reserve (Mali) lies mostly on the left bank of the Baoulé River and covers an area of 2,500,000 ha. It is located in the West part of Mali and crosses the region of Koulikoro and Kayes. Boucle du Baoulé Biosphere Reserve is part of the ROSELT network.
19. This protected area complex crosses two biogeographical zones: the Sudano-Guinean zone to the south and the Sahelian zone to the north, which are often considered as the most important faunal assemblages within the country. Major habitats and savanna types are wooded and bush savanna, *Butyrospermum paradoxum* savannah herbaceous steppes and grasslands. Large fauna such as elephants are present.
20. Major land uses are agriculture and livestock husbandry, forestry, and crafts. Pressures on the core area of the biosphere reserve are increasing as local communities exploit resources therein given that they have few other viable livelihood options and fertile lands are scarce in areas surrounding the biosphere reserve. Scarcity of water points creates competition between fauna and cattle (for example, competition may be acute between Bubales, Kobs and the bovines (Peuls and Moorish zebus) while also leading to increased poaching in the environs of the water points. Large fauna is under heavy pressure from hunting as well.

“W” Biosphere Reserve

21. The “W” Biosphere Reserve (Niger) is situated in the southwestern region of Niger, the "W" region, and lies in an ancient peneplain with little altitudinal variation. Its diversity is primarily a result of the hydrographic regime in three different watershed basins. The total area of the “W” Biosphere Reserve is 728,000 hectares.
22. It is estimated that some 80% of the country's biological diversity occurs in this region. Main types of habitat are gallery forests, woodlands, scrublands and grasslands. The core area is mainly composed of savannas and gallery forest and it remains a sanctuary where the last giraffes of West Africa are found. Other wildlife species include elephant, lion, antelope, Uganda kob, common waterbuck, crocodile, hippopotamus, and giraffe.
23. In the transition area the main activities are agriculture, grazing and goat raising. Threats to biodiversity and constraints to effective management are the lack of adequate infrastructure

and staff personnel for monitoring purposes, lack of water points (which encourages the concentration of wildlife around the Mékrou and Niger rivers), increased grazing in forest lands, bush fires and poaching (particularly in the Anana area).

Niokolo Koba Biosphere Reserve

24. The Niokolo-Koba Biosphere Reserve (Senegal) straddles the border between the administrative regions of Senegal-Oriental and La Casamance, on the River Gambia, close to the Guinean border in southeastern Senegal and covers an area of 913,000 hectares.
25. Habitats include herbaceous savanna dominated by *Andropogon gayanus*, seasonally flooded grassland and dry forest, areas with bamboo, freshwater wetlands, and gallery forests. Niokolo Koba Biosphere Reserve provides a habitat for the Derby eland (largest of the antelopes), elephant, chimpanzee, lion, elephant as well as many bird, reptile and amphibian species.
26. Major land uses in the transition areas are agriculture, pastoralism, honey gathering and craft activities. Rural communities surround the Niokolo Koba Park and form the transition area of the biosphere reserve. The communities make claims on access to resources located within the buffer zone and the core area of Niokolo Koba Park resulting in conflicts between local communities and biosphere reserve management staff. Large mammals are threatened by poaching and the reduction of natural habitat threatens some migratory species. The lack of an institutional and co-ordination structure for integrated management of Niokolo Koba Biosphere Reserve remains a major constraint to effective management.

COMMON CHALLENGES AND BARRIERS TO EFFECTIVE BIOSPHERE RESERVE MANAGEMENT

27. During the course of the PDF B phase of the project², biosphere reserve managers concluded that although the biodiversity resources that they are managing are under different kinds and degrees of threats, that they faced similar constraints that prevented them from effectively managing the biosphere reserves. These common management problems are not adequately addressed by existing investments. The primary barriers or constraints that limit and in some cases prevent effective management are identified in Table Two below.

² During the PDF B, a participatory project design process that lasted 2 years, consultations were held within the biosphere reserves and at the national level. These stakeholder consultations had, as their primary objective, the design of this targeted intervention. A key to achieving this objective was to ensure that the proposed project would avoid duplication and be complementary with on-going or planned projects in the same sites such that the combined suite of interventions would contribute to sustainable management of the biosphere reserves. National scientific reports were developed, compiling the information/knowledge needs and capacity building in all six biosphere reserves. These proposals were synthesised at the regional level in Dakar, in February 2002. Each country was represented by the national scientific consultant, the MAB National Committee focal point, a representative of local communities and the biosphere reserve managers. All management information and training needs were therefore those needs identified by the participating countries, through consultations at the biosphere reserve level (local), national level, and regional level. The national reports and the regional reports are available in French (see list of reference materials in annex M). Annex L provides a schematic presentation of the consultation process at regional, national and local levels.

Table Two. Common Barriers and Constraints Limiting Effective Management

<p>Knowledge/Information Gap</p> <ul style="list-style-type: none">• Local populations have been identified as essential in the management of the biosphere reserves but at the same time, they are perceived by many as being a “management problem”. The impact on the ecosystem by local resource users is difficult to measure in the absence of baseline data and appropriate indicators on biodiversity. Thus, the lack of knowledge on the impact of human activities on the savanna ecosystems and on how to measure, compare, monitor and minimize any negative impacts is a limiting factor to effective management.• Information and data available in the sites are not adapted to address management needs, to the objectives assigned to a biosphere reserve, the pressures on biosphere reserves, or the livelihoods needs of local communities.• A major imbalance exists in available data and survey information in that much more information is available in natural sciences compared to social sciences and social science information is essential in biosphere reserve management.• Lack of standard or inter-calibrated methods and research protocols to identify, measure and monitor biodiversity and the goods and services provided by the biosphere reserve.
<p>Weak institutional co-ordination, co-operation, and communication</p> <ul style="list-style-type: none">• Inadequate co-operation and co-ordination amongst agencies and institutions responsible for research, conservation and natural resources management.• Absence of a co-ordination structure within each biosphere reserve limits opportunities for permanent dialogue between the various stakeholders to resolve conflicts between resource-user groups and national and local authorities, all of which undermines conservation efforts and sustainable and integrated management of the biosphere reserve.• The importance of local knowledge was also mentioned as a tool to reduce conflicts between local communities and managers of the sites. Often traditional knowledge is neglected and considered pejoratively as “folklore”. Thus, in all the six sites, these perceptions and the lack of communication and consultation between the various stakeholders living and working in the biosphere reserve make it difficult to establish management plans that are supported by local communities.
<p>Limited capacity of all stakeholders</p> <ul style="list-style-type: none">• Limited expertise and capacity at the individual and institutional level to manage the biosphere reserve <i>in collaboration</i> with local communities.• Shortage of expertise in natural resources management.• Absence of a systematic approach to building knowledge, expertise and institutional and managerial skills and capacities.• Lack of knowledge and awareness amongst the local communities about the conservation and sustainable development objectives inherent to a biosphere reserve and how they can benefit from its successful management.

2.2 RATIONALE AND OBJECTIVES (GEF ALTERNATIVE STRATEGY)

28. The development goal of the project is to conserve and sustainably use biodiversity in six biosphere reserves in West Africa that are predominantly composed of savanna ecosystems. The project purpose is to systematically strengthen scientific and technical capacity for effective management of the biosphere reserves.
29. In order to achieve this purpose, project implementation will emphasise improving the understanding of interactions between local communities and savanna ecosystems, identifying and promoting sustainable use of biodiversity in pilot demonstrations, strengthening stakeholder capacity, and integrating all stakeholders into the management of each biosphere reserve. The project will make extensive use of the AfriMAB network and, in particular, the sub-regional AfriMAB network for West Africa for technical and scientific information exchange and capacity building. The principles of the Ecosystem Approach as adopted by the Parties to the CBD in May 2000, the recommendations of the Seville Strategy for biosphere reserves, and the results of AfriMAB's thematic working groups will guide project implementation. In particular, goals II, III and IV of the Seville Strategy will inform project implementation³.
30. All of the participating biosphere reserves are active in the AfriMAB, a continent-wide network that was formally created in 1996 in Dakar (Sénégal). The staff of the biosphere reserves already participate in thematic working groups on the following issues: 1) regulatory, legislative and institutional frameworks of biosphere reserves; 2) stakeholder/social-actor participation, and income sharing; 3) scientific research and capacity building; 4) management of transboundary biosphere reserves. The shared workplan of AfriMAB provides a framework for the harmonisation of data within and across sites and provides an institutional and structural consistency throughout the network.
31. Central to the project implementation strategy is to use the AfriMAB network to facilitate the exchange of experience and practices among sites. This institutional infrastructure will be central to systematically removing barriers to building knowledge, expertise, and institutional and managerial skills and capacities required for implementing integrated conservation and development approaches. The AfriMAB network provides the institutional framework whereby successful programmes and policies in one country can help set examples and precedents for other countries to emulate. The proposed project will help catalyse this process. The project pilot sites and the responses designed to mitigate the threats to biodiversity will reflect both the commonality and diversity of threats that the biosphere reserves face. The lessons learned from this experience will be shared amongst resource managers and communities throughout the region via the AfriMAB network and the MAB Secretariat.

³Utilise biosphere reserves as models of land management and approaches to sustainable development (Goal II). Secure the support and involvement of local people (Objective II.1). Use biosphere reserves for research, monitoring, education and training (Goal III). Improve knowledge on the interactions between humans and the biosphere (Objective III.1) Improve monitoring activities (Objective III.2). Improve education, public awareness and involvement (Objective III.3). Improve training for specialists and managers (Objective III.4). Implement the biosphere reserve concept (Goal IV). Integrate the functions of biosphere reserves (Objective IV.1).

32. The regional dimension of the project will add value to achieving the project purpose in the area of scientific and technical capacity and institutional strengthening as detailed below:

Scientific and Technical Capacity

- An increased understanding of ecological processes across a gradient of biophysical and human cultural conditions that are representative of West African savannas will support more informed management decisions within each reserve and, over time, in other protected areas outside the scope of this project. In addition, application of common impact indicators of human activity for comparison of the sites and tested at the regional level will enhance understanding of human impacts at the reserves and provide needed scientific input to management decisions.
- A functioning regional biodiversity information system supporting the exchange of data and information (including best practices in sustainable use) and a biodiversity expertise network will contribute to improved management throughout the reserves and the region. Expected contributions of case studies on biodiversity and on conflicts related to access and use of resources; and analysis of local and national institutions responsible for managing resources will permit comparative analyses of lessons learned and best practices.

Institutional Strengthening

- The reinforcement of the AfriMAB network will facilitate exchange of learning, skills and experience in similar ecosystems being managed under similar structures, i.e., biosphere reserves.
 - A strengthened and more effective AfriMAB network will improve cooperation in the management of West African savanna ecosystems and will raise awareness of the importance of savanna ecosystems in the region.
 - Improved communication and information-sharing among the six sites and the six MAB national committees will result in strengthening the management systems/institutions of the individual biosphere reserves.
33. The targeted intervention strategy has been designed to complement existing investments and projects within the biosphere reserves as is fully described in Annex 9J. As part of the project planning and design process, the focal point of each MAB National Committee established contacts with the leaders of other projects within each biosphere reserve. During the national stakeholder workshops that were held in all six countries at the start of the PDF B, a dialogue was initiated as part of a concerted effort to avoid duplication and to facilitate communication and exchange with ongoing projects. The concerns and priorities of the project leaders involved in the ongoing projects were taken into account along with the priorities expressed by the regional project's national-level executing agencies to ensure complementarity of the proposed regional intervention with national level projects. Most importantly, the targeted nature of the regional intervention was designed to add value to national level efforts and to contribute to the long-term sustainable management of the biosphere reserves. Hence, all key stakeholders validated the added value of the activities

proposed within the regional project. During the implementation of the project, the same process will be implemented in each country. National seminars will be organized on thematic components of the Regional Project and all other project officers from existing projects will be invited to participate to ensure that complementarity is maintained during project execution and value is added to ongoing initiatives. Project coordination at the biosphere reserve level and at the national level will be the responsibility of the MAB National Committee. The Committee will be charged with convening national consultations and information seminars with the resource persons and national institutions in charge of the ongoing GEF and non-GEF national projects to facilitate continued cooperation.

34. The project meets the criteria of the GEF Operational Programme #1 on Arid and Semi-Arid Zone Ecosystems in that it aims to integrate biodiversity conservation and sustainable use objectives in land use planning and biosphere reserve management. It intends to set up pilot demonstrations that will validate alternative economic activities for local and indigenous communities residing in buffer and transition zones of globally important biological areas. It responds to country-driven national priorities by identifying components of biological diversity important for sustainable use, as well as understanding and analysing the processes and categories of activities that have or are likely to have significant adverse impacts on the sustainable use of biodiversity.
35. The project is supportive of two of the Strategic Objectives of the UNEP GEF Action Plan on complementarity agreed to by the 20th Session of the UNEP Governing Council of UNEP and the 13th session of the GEF Council. First, through a targeted capacity building intervention, the project will assist countries to make informed strategic and operational decisions on scientific and technical issues related to biosphere reserve management and, in so doing eliminate a fundamental barrier to effective biosphere reserve management identified by the countries during the project design process. Second, global environmental benefits will be achieved in six globally significant sites through regional and multi-country implementation and cooperation and the added value this brings to the work of each participating biosphere reserve.
36. The project is consistent with the findings and recommendations of the Second Overall Performance Study of the GEF for the biodiversity focal area. In particular, extensive stakeholder consultations were held at national level and within each biosphere reserve, the funding patterns of the project are compatible with absorptive capacity, targeted objectives are established that are achievable within the project time frame, and allowances are made for establishing baselines in the first year of the project to measure project impact.
37. The project design reflects ongoing discussions related to the biodiversity focal area of the GEF and observations made during the GEF Biodiversity Program Study. The project will support sustainability of protected area management through a targeted intervention to increase scientific and technical capacity at the individual and institutional levels to improve management of biosphere reserves. Strengthening existing institutions and biosphere reserve management structures will enhance sustainability of protected area management within these reserves particularly when seen in complement to existing investments. Building on the broad stakeholder consultation initiated during the PDF B, the project will improve opportunities among local communities to sustainably use biodiversity. A key aspect of the

project is to enhance collaboration and coordination between government agencies at the national level responsible for research, conservation and natural resources management and other stakeholders within each biosphere reserve. Establishment of a permanent dialogue between the various stakeholders to resolve conflicts between resource-user groups and national and local authorities will support conservation efforts and sustainable and integrated management of the biosphere reserves.

38. Through executing the project at the regional level in combination with strengthening AfriMAB, an indigenous and existing knowledge network for improving protected area management in West Africa, a synthesis and dissemination of best practices and lessons learned at the regional level will be achieved.

2.3 PROJECT ACTIVITIES/COMPONENTS AND EXPECTED RESULTS

Component One: Generation of Management Information to Improve Conservation and Sustainable Use of Biodiversity

39. The primary objective of Component One is *to improve the understanding of the impact of human activities on savanna ecosystems.*
40. The six countries have agreed to collaborate in a common programme to generate management information to improve conservation and sustainable use of biodiversity. Each biosphere reserve will conduct the following activities:
 - a) Analysis of the dynamics of human settlements and their impact on ecosystems through:
 - i) study of the evolution of demographic pressures in the biosphere reserve;
 - ii) analysis of impacts of agriculture and human settlements on biodiversity;
 - iii) analysis of the impact of fishing, hunting, plant collecting, pastoralism and firewood collecting on the ecosystems. Each site will conduct these studies and common indicators will be developed which will allow for comparisons of impacts of these activities across sites and biosphere reserves;
 - b) Local economies will be analysed and studied;
 - c) Perceptions of local communities on nature, and local knowledge about biodiversity will be examined.
41. The MAB National Committee, the scientific community that will participate in the Project implementation phase, the manager of the biosphere reserve, and the representatives of local communities all validated these priority activities identified at the national level during the PDF B phase.
42. Activities within this component will acknowledge and make use of existing know-how and local and national capacity, including local community practices and perceptions of their environment and the biosphere reserve. The outputs of this component will provide

information to address the management needs identified by the managers of the biosphere reserves and livelihood needs of local communities expressed during the PDF B phase. These results will be applied in Component Two at the demonstration sites as the sustainable practices of local communities identified in Component One will be promoted in Component Two. Accordingly, this may lead to modifying the management plan of the biosphere reserve.

43. National and local universities and research institutions will assist in the execution of the proposed activities within this component. National PhD and Masters students will undertake their field studies in the biosphere reserve in collaboration with the MAB National Committee and the management staff of the biosphere reserve. Publications such as scientific and popular articles, biodiversity guidelines for biosphere reserves, etc. will be produced during the Project and disseminated through the internet and the AfriMAB network.
44. The purpose of this component, which will be the first step of a long-term effort, is to provide information to managers of the biosphere reserves on the impact of identified land-use practices on biodiversity and on the sustainability of specific plant harvesting strategies. Biosphere reserve managers, in collaboration with local communities and other stakeholders, can then promote and implement those practices that provide the greatest biodiversity and human development benefits. Results/outputs will be collated and synthesised in a database that then can be used for scientific and management purposes.
45. Biological indicators will be designed to allow for comparison among the six sites and for monitoring purposes. Such indicators will also relate to other global efforts including, *inter alia*, GTOS (Global Terrestrial Observing System), ROSELT and BRIM (Biosphere Reserve Integrated Monitoring). In addition, appropriate indicators for studying socio-economic impacts on the ecosystem will be identified. These indicators will be used and tested in Component Two at the demonstration sites for alternative economic activities and resource uses in the buffer and transition zones.

Component Two: Conservation and Sustainable Use of Biodiversity

46. The primary objective of Component Two is to *identify and promote viable activities that conserve and sustainably use biodiversity*. The identification and piloting of alternative economic activities and sustainable resource uses in biosphere reserves will build on the existing management and conservation plans of the six biosphere reserves and the information outputs generated in Component One. During the PDF B, the six countries identified the demonstration sites where alternative economic activities and sustainable resource uses would be tested in the buffer zones and transition areas. These activities are identified in the project logframe for each biosphere reserve.
47. This component will test and use the information generated and the impact indicators developed in each country in Component One. Local communities will work with the scientists on designing sustainable land use practices and alternative activities and will test them in demonstration sites with the biosphere reserve staff and the scientific team. The testing of indicators will help the biosphere reserve managers to monitor changes, impacts

and best land use options in the biosphere reserve. These results will be discussed with all the stakeholders and could be integrated into a revised management plan of the biosphere reserve.

48. The establishment of monitoring plots in the core area of each biosphere reserve will allow comparison within the biosphere reserve of impacts of some human activities on the ecosystem. The impact of human activities taking place in the transition zone will be monitored through the use of impact indicators as developed in Component One. These indicators will be tested in the core areas, where the monitoring plots will be established. The work of ROSELT will be used and complemented in Boucle du Baoulé Biosphere Reserve, Comoé Biosphere Reserve and Parc du “W”.

Component Three: Strengthening Capacity and Institutional Co-ordination to Effectively Manage Biosphere Reserves

49. The primary objective of Component Three is to *strengthen the managerial skills and technical capacities of stakeholders* (biosphere reserve managers and their staff, local communities, NGOs, government agencies, universities, etc.) involved in the management of the six biosphere reserves through the establishment of appropriate learning and training mechanisms. The capacity building strategy and training plan for the project can be found in Annex 9K.

50. This objective will be achieved by:

- a) Implementing training identified in the PDFB phase that is targeted specifically to local communities and biosphere reserve managers and their staff. Sites in each biosphere reserve will also provide field study opportunities for national university students. Identified training needs per target group are as follows:
 - i. Local communities: Enhancing capacity to access existing microcredit programs to create microenterprises and training in microenterprise development as appropriate for each BR (e.g., ecotourism including the training of guides and the development of ecovillages such as in Côte d’Ivoire⁴; etc.)
 - ii. Reserve managers: Application of GIS and database management in resource use planning;
 - iii. University personnel: National PhD students will be members of the scientific team responsible for the implementation of Component One and will conduct their field surveys and research in the biosphere reserve.
- b) Providing basic equipment (laboratories, access to internet and email) to facilitate training and research, exchange of information, and improved communication among the six biosphere reserves and the AfriMAB network.
- c) Implementing education and awareness-raising programmes in each biosphere reserve

⁴ Local communities are hosting tourists in their villages, following the Bed and Breakfast concept.

in collaboration with ministries concerned using a variety of media appropriate for each stakeholder group.

d) Establishing a co-ordination mechanism for the integration of community participation in project decision-making at each biosphere reserve (based on results from Components One and Two). This mechanism will include integration of indigenous technical knowledge into the management plan.

e) Disseminating information generated, best practices and lessons learnt in Components One and Two through the AfriMAB network.

51. In addition to the specific training listed above, training will be provided at the regional level on common themes that were identified by the six countries during the project planning phase: a) conflict management and mediation; b) environmental education and awareness raising; c) multidisciplinary research and diagnosis; d) informatics. The AfriMAB network will facilitate the regional training, organise cross-site visits between the six sites for managers, local populations and scientists in order to exchange experience and information, and will disseminate the knowledge generated in Component One, best practice and success stories through the region via the network. Agreed procedures and protocols for information exchange will be agreed by the six reserves.

52. Based on extensive studies of local institutions and coordination structures within each biosphere reserve initiated in the PDF B phase, conflict mediation mechanisms will be established in all six biosphere reserves for conflict-management and resolution amongst biosphere reserve managers, local communities, scientists, and national and local government agencies. The expected outcome from this activity will be a reduction of conflicts for access to and use of natural resources in the six sites. The organisation of training for conflict resolution in each site and at the regional level will also facilitate the identification of local and national mediators. In each biosphere reserve, individuals are called upon for solving conflicts between groups of villagers or between the villagers and the staff of the biosphere reserve. The projects intend to identify these local mediators and provide them with further training. In addition, those with the right aptitude and capacity will be trained to train others in mediation and conflict resolution. This process will help legitimise local mediators in each biosphere reserve at the end of the project. A roster of recognized mediators for each biosphere reserve will be developed and they can then also be called upon as experts for conflict resolution at the regional level.

53. In sum, the project aims to build long-term conservation and sustainable use of biodiversity on the foundation of sound scientific information and will emphasise both strengthening stakeholder capacity and the integration of stakeholders into biosphere reserve management. Activities carried out in Component One will provide inputs for conservation of the core area and sustainable use of biodiversity in buffer zones and transition areas, as targeted in Component Two. The training and exchange activities planned in Component Three will help to build capacity of a wide array of stakeholders and establish better communication and understanding between the various stakeholders on the objectives assigned to a biosphere reserve and the role it can play in conservation, sustainable land management and

development of a region. The regional nature of the project will allow exchange of information and experience on a regional scale and will ensure the wide dissemination of the results and lessons learned from the conservation management information generated, sustainable use, and biodiversity monitoring activities.

54. Table Three demonstrates the linkages between the three components and Annex 9J outlines the added value the regional project provides to ongoing initiatives in the biosphere reserves.

Table Three. Linkages Between Generating and Applying Conservation Management Information, Capacity Building and Dissemination of Results

All biosphere reserves	Conservation Management Themes (Component One)	Activities to Generate Conservation Management Information	Expected application (Component Two and Three)	Dissemination strategy for results for the six biosphere reserves (Component Three)
<p>Pendjari (Bénin)</p> <p>Mare aux Hippopotames (Burkina Faso)</p> <p>Comoé (Côte d'Ivoire)</p> <p>Boucle du Baoulé (Mali)</p> <p>W (Niger)</p> <p>Niokolo Koba (Sénégal)</p>	<p>1) Analysing dynamics of land occupation and their impact on ecosystems;</p> <p>2) Analysing the impact of fishing, hunting, collecting, pastoralism and wood collecting on ecosystems;</p> <p>3) Analysing interactions between local communities and ecosystems.</p>	<p>1.1) Evolution of demographic pressure in each biosphere reserve.</p> <p>1.2) Agriculture and biodiversity: study spatial dynamics of agriculture and impacts on biodiversity.</p> <p>2.1) Fishing and biodiversity (organisation, fish activities and commercialisation)</p> <p>2.2) Impacts of pastoralism, collecting of plants, firewood gathering, hunting, tourism and biodiversity</p> <p>3.1) Study of local economies (standard of living, incomes, social rules and institutions);</p> <p>3.2) Perceptions of local communities on ecosystems and the biosphere reserve;</p> <p>3.3) Local knowledge on biodiversity</p>	<p>1.1.1) Recommendations on access to lands and resources in the site.</p> <p>1.1.2) Proposals of new techniques for soil fertility maintenance.</p> <p>2.1.1 and 2.1.2)</p> <ul style="list-style-type: none"> • Indicators will be tested and a hierarchy of most threatening impacts will be designed. Modelling of the dynamic of ecosystems will be done to test the long-term effects of these studied uses on the ecosystems. • Alternative economic activities and sustainable resource uses will be identified and tested in the six sites. <p>3.1.1 and 3.2.1) Testing of indicators and design of modalities for conflict management adapted to local rules and practices and testing of alternative activities for local communities which will provide incomes.</p> <p>3.3.1) Substantiation of technical know-how and participation of local communities in the management of the biosphere reserve</p>	<p>Local communities will convene local workshops and/or national day; use local communication means (radio programmes, Tam Tam music instrument, such as in Comoé Biosphere Reserve, the Speakers Tree in Niger, etc).</p> <p>Publications will be produced by the MAB National Committee in co-operation with the scientific team and materials for the wider public will be produced and translated into main local languages (scientific articles, local and national newspapers, national TV programmes).</p> <p>Major results will be put on the Biosphere Reserve website and in the MAB National Committee web site.</p> <p>MAB National Committees will conduct national seminars in each country and invite relevant key actors in the field of environment and scientific research.</p> <p>MAB National Committees focal points and selected scientists will participate in scientific workshops related to biodiversity issues.</p>

2.4 RISKS AND SUSTAINABILITY

55. Participation and long-term support of local communities is essential for the effective and sustainable management of a biosphere reserve and this will be achieved through building co-ordination mechanisms and institutional platforms of credible and legitimate institutions for permanent dialogue and management of resources in each of the biosphere reserves. In addition, reserve managers must demonstrate that effective management of a biosphere reserve can provide tangible benefits to local people. To decrease the dependency of the six sites on external funding, financial instruments to cover the costs of reserve management will be investigated starting with the current study being conducted by the Pendjari Biosphere Reserve on the creation of a trust fund for the reserve. Results of this analysis will be shared with the five other reserves and options evaluated.
56. The planned activities are designed to ensure long-term sustainability of biodiversity conservation management through the following actions: (a) reinforcing the MAB National Committees, and establishment of working arrangements for the co-ordinating structures of biosphere reserves that involve communities. This institutional structure will conform to existing governance structures (co-ordination with local governments; recognition of traditional leaders) and serve as a forum for conflict resolution, negotiation and for establishing a permanent dialogue between the different stakeholders involved in biosphere reserve management; (b) linking the project initiatives with national government programmes to ensure consistency as well as continuity of operations beyond the project's life (e.g., ensuring that counterpart government contributions are set up to support the activities of local communities; development of Memoranda of Understanding between local and national universities and the biosphere reserves in order to ensure the continuity of priority research as identified by the managers of the biosphere reserves); (c) designing and implementing local resource mobilisation strategies, including livelihood initiatives such as ecotourism, and securing financial support from other funding sources including the establishment of trust funds; and d) training in sustainable natural resources management. The main resource uses that will be addressed in the project, i.e., eco-tourism, hunting, collecting, pastoralism, etc., are crucial socio-economic activities that the countries consider an essential element of the sustainability of each site. Local and national stakeholders have identified these issues as being at the heart of the sustainability of the sites.
57. Sustainability of the project's outcomes will mainly rely on individual and institutional capacity building to secure the long term support of local stakeholders for the conservation and sustainable development of the biosphere reserve, and to guarantee the support of national authorities for the use of biosphere reserves as demonstration sites for sustainable development activities and conservation of savanna ecosystems. Socio-economic sustainability will rely on a comprehensive understanding of the interests of all actors involved in the management of the site. Benefits and socio-economic alternatives which will be examined and demonstrated in the project in Components One and Two.
58. The regional dimension of the Project aims to reinforce the national capacities of the stakeholders at the six sites to communicate and exchange results and experience amongst themselves. The strengthening of the West Africa Sub-regional AfriMAB network will help ensure that the project will continue the activities initiated during the four-year project.

59. The Project will also initiate a regional approach that will allow each site to develop the required technical and institutional tools to work together (access to e-mail and internet for each biosphere reserve, establishment of a network connection between the six sites) and to install a permanent platform for exchange of information and experience after project termination.
60. The Logframe matrix presented in Annex 9B details the project-related risks and assumptions.
61. Risk reduction in conservation and sustainable use activities has been a key consideration in the design of the project. Lessons learned from other projects have been brought to bear on the design of the project. Main project risks include failure of countries to stay in line with the regional aspects of the project, i.e. some countries become more advanced in one component, and co-ordination efforts will be made to ensure smooth harmonisation between the six countries to respect the common schedule and workplan. Another risk is political and institutional stability, which can vary from one country to another. Changes in the designation of biosphere reserve managers and MAB focal points could result in creating some delays in the implementation of the work plan as well as in creating some changes in the working relations between the various stakeholders inside a country. However, the project relies on existing and respected established institutions such as MAB National Committee and Park management bodies and this risk is therefore minimised. Another risk is the inadequate representativeness of the stakeholders who will be trained in Component Three. Careful consultations were held during the project planning process, which helped to identify the main needs in training and the main target groups. Local communities have been informed about the objectives of the project through national workshops. Representatives of local communities participated in the Dakar regional meeting and were able to express their needs for training and alternative economic activities. Participation of local community representatives during the regional meeting was seen as a very positive output of the project planning phase and the representatives of local communities received support to inform the villages in their biosphere reserve about the main results of the Dakar regional meeting. The implementation of the project will be based on a participatory process involving local community councils and structures.

2.5 INCREMENTAL COSTS AND PROJECT FINANCING

62. GEF resources will be used to strengthen biosphere reserve management through technical training, generation of conservation management information, biodiversity monitoring, and the development of regional co-operation mechanisms for technical information exchange. Design and extension of alternative economic activities and sustainable resource uses within each biosphere reserve and investigations designed to support the evaluation of the sustainable use of biodiversity will generate some domestic benefits and co-financing has been secured to support these project activities.
63. Under the GEF alternative, an expanded programme will be implemented, focusing on those activities that generate global benefits. These include initiatives for biodiversity resource assessments and on-the-ground inventories in demonstration sites in the six biosphere reserves of high global significance; promotion of alternative livelihood options in globally important and threatened savanna areas as models that may be replicable in other biosphere reserves in the continent and world wide; development of conservation management information relying

on community-based management approaches to supplement government park enforcement by engaging local communities, private sector bodies and NGO in sustainable management of biosphere reserves; and strengthening capacity of local and national stakeholders to manage the biosphere reserves in a co-ordinated way and with reduced conflicts. This alternative scenario aims to avert continued biodiversity degradation by strengthening the management of each biosphere reserve.

64. Table Four provides a summary of baseline and incremental costs by output/component and Table Five provides information on Component Financing and Cofunding. The three components complement the existing baseline within each country and at the regional level for the regional level activities. Details of incremental costs, an incremental cost analysis, and global and domestic benefits are presented in Annex 9A.
65. Adopting a regional approach to concerted action incurs minor transaction costs since the six countries are already linked through the AfriMAB network. The countries of the region are clearly committed to a regional approach as made evident through their active participation to the PDF-B process and their adoption of a regional workplan. The costs of actions that result in direct national benefit are those associated with the demonstration activities where the countries concerned will undoubtedly derive national benefits.
66. Table Five presents the project budget and component financing. The total cost of the project is US\$6,098,000 million dollars of which US\$1,264,000 are the anticipated costs to the government in cash and in kind. Co-financing is assured from a number of sources for a total amount of US\$3,698,000. The remaining amount, US\$ 2,400,000, is being requested from the GEF.

Table Four. Baseline and Incremental Costs in US\$

Component	Partner	Baseline	Alternative	Increment
Output 1	Bénin	165,000	450,000	285,000
	Burkina Faso	370,000	620,000	250,000
	Côte d'Ivoire	245,000	375,000	130,000
	Mali	130,000	260,000	130,000
	Niger	310,000	450,000	140,000
	Senegal	150,000	280,000	130,000
	UNESCO	40,000	130,000	90,000
Total		1,410,000	2,565,000	1,155,000
Output 2	Bénin	7,260,000 ⁵	7,500,000	240,000
	Burkina Faso	550,000	800,000	250,000
	Côte d'Ivoire	425,000	545,000	120,000
	Mali	400,000	670,000	270,000
	Niger	820,000	970,000	150,000
	Sénégal	720,000	830,000	110,000
	UNESCO	40,000	160,000	120,000
Total		10,215,000	11,475,000	1,260,000
Output 3	Bénin	590,000	890,000	300,000
	Burkina Faso	355,000	605,000	250,000
	Côte d'Ivoire	180,000	330,000	150,000
	Mali	150,000	335,000	185,000
	Niger	375,000	515,000	140,000
	Sénégal	420,000	550,000	130,000
	UNESCO	30,000	200,000	170,000
Total		2,100,000	3,425,000	1,325,000
Regional Project and Co-ordination	Bénin	25,000	305,000	280,000
	Burkina Faso	20,000	270,000	250,000
	Côte d'Ivoire	25,000	285,000	260,000
	Mali	40,000	200,000	160,000
	Niger	55,000	220,000	165,000
	Sénégal	40,000	200,000	160,000
	UNESCO	33,000	1,116,000	1,083,000
Total		238,000	2,596,000	2,358,000
GRAND TOTAL		13,963,000	20,061,000	6,098,000

⁵ Bénin's baseline figures for conservation are high compared to other countries due to the support of many international funding institutions such as GEF, European Union and the GTZ contributing almost \$US 6 million for conservation of the Pendjari Park.

TABLE FIVE. COMPONENT FINANCING								
Component	Partner	Increment	Co-funding			International Partners	Requested from GEF	
			Governments		Other Sources in Countries			
			In-kind	Cash				
ONE	Bénin	285,000	25,000	0	186,000 ABE	200,000/PNGT	74,000	
	Burkina Faso	250,000	20,000	0			30,000	
	Côte d'Ivoire	130,000	35,000	0	30,000/CRE		65,000	
	Mali	130,000	25,000	0			105,000	
	Niger	140,000	15,000	0			125,000	
	Sénégal	130,000	27,000	0			103,000	
	UNESCO	90,000					20,000/MAB 50,000 WWF	20,000
Total		1,115,000	147,000	0	216,000	270,000	522,000	
TWO	Bénin	240,000	60,000	0	100,000 ABE	157,000/PNGT	80,000	
	Burkina Faso	250,000	45,000	0			48,000	
	Côte d'Ivoire	120,000	50,000	0			70,000	
	Mali	270,000	55,000	0			200,000/FSP	15,000
	Niger	150,000	60,000	0			90,000	
	Sénégal	110,000	42,000	0			68,000	
	UNESCO	120,000					20,000/MAB 50,000/WWF	50,000
Total		1,260,000	312,000	0	100,000	427,000	421,000	
THREE								
	Bénin	300,000	18,000		186,000/Pace	150,000/PNGT	96,000	
	Burkina Faso	250,000	25,000				80,000	
	Côte d'Ivoire	150,000	30,000		20,000/CRE		100,000	
	Mali	185,000	15,000				74,000/FSP	95,000
	Niger	140,000	13,000	64,000			65,000	
	Sénégal	130,000	35,000				95,000	
	UNESCO	170,000					25,000/MAB 100,000/WWF	45,000
Total		1,325,000	136,000	64,000	206,000	349,000	576,000	
Regional Project and Co-ordination	Bénin	280,000	110,000		100,000Pace	50,000PNGT	60,000	
	Burkina Faso	250,000	120,000				80,000	
	Côte d'Ivoire	260,000	130,000		50,000/CRE		80,000	
	Mali	160,000	100,000				60,000	
	Niger	165,000	70,000				95,000	
	Sénégal	160,000	80,000				80,000	
	UNESCO	1,083,000					366,000/MAB 300,000/WWF	426,000
Total		2,358,000	610,000	0	150,000	716,000	881,000⁶	
GRAND TOTAL		6,098,000	1,205,000	64,000	672,000	1,762,000	2,400,000	

⁶ The funds requested from GEF for project coordination of regional activities will meet costs of full time project manager, direct administration charges, project manager's travel, regional training and the work of the International Steering Committee.

2.6 MONITORING, EVALUATION AND DISSEMINATION

67. An information baseline on savanna ecosystem structure in the core area of the six biosphere reserves will be established during the first year to provide the basis for future monitoring and evaluation. Project progress will be monitored by: 1) measuring the population dynamics of key species; 2) conducting comparative ecological surveys in the biosphere reserve (monitoring plot in the core area and monitoring plot in transition area); 3) surveying the impacts on the livelihoods and participation of local communities, and their level of support for conservation efforts, using a set of indicators which will be developed during project implementation (Component One). Since three biosphere reserves participating in the Project sites are also ROSELT or associated sites, indicators and monitoring structures used by the OSS (Observatoire du Sahara et du Sahel) will be integrated into the Project monitoring efforts.
68. Additional monitoring and evaluation procedures will be established during project implementation with BRIM (Biosphere Reserve Integrated Monitoring) supervised by the MAB Secretariat. BRIM undertakes abiotic, biodiversity, socio-economic and integrated monitoring in the World Network of Biosphere Reserves. Its goal is to provide a platform for the integration of the resulting information/data, thus contributing to a better understanding of the changes that take place in the areas being studied and of the factors triggering these changes. BRIM is planning several workshops on building indicators on socio-economic aspects. The most recent workshop on social aspects of monitoring of biodiversity was held in December 2002. MAB National Committees focal points and scientists participated in this workshop. The results of this meeting will be used in the elaboration of indicators for monitoring biodiversity and impacts of resource use in the biosphere reserves. The *Seville Strategy* presents implementation indicators at the local, national and international levels for the World Network of Biosphere Reserves. These implementation indicators will also be used within the Project process. The IUCN/WB Protected Area scorecard will be used as appropriate for the core area of each biosphere reserve.
69. Monitoring of project performance will be undertaken following UNEP's guidelines for project monitoring and evaluation and will include analysing project impact per the indicators developed in the project logframe. The Semi-Annual progress reports (Annex 6A) will include an updated logframe (Logframe Tracking Tool: Annex 6C), which will identify the established baselines at project start-up and achievements in reaching target indicators as of that reporting period. This process will include a mid-term assessment and end-of-project assessment undertaken by external review teams arranged by UNEP. In addition, the UNEP project task manager will conduct annual project supervision missions in collaboration with the project manager of UNESCO/MAB to review project progress and to amend the work plan and intervention strategy accordingly, subject to the approval of the Project Steering Committee.
70. The international Project Steering Committee will monitor progress on an annual basis and will approve adjustments to the workplan and timetable required as a consequence of unforeseen events.
71. Dissemination of results will take place through local, national and regional initiatives. At the local level, local communities will receive support to convene local seminars, using the Speaker's tree approach, as normally practised in West African villages. Local media, such as

radio and the Tam Tam musical instrument will also be used for dissemination of information within each biosphere reserve. MAB National Committees and the scientific team will assist the local communities in the preparation of popular materials, which will present the main results of the project activities. Translation into main local languages will be a key part of the communication strategy. Representatives of local communities will be invited to participate in the national and regional meetings and consultations planned periodically throughout the project.

72. Biosphere reserve offices will be connected to internet and will create their own web site. The six biosphere reserves will be intra-connected and will be able to exchange emails and information. MAB National Committees will also be connected to internet and will design national websites. These websites will provide information on the national activities implemented during the project and will present the main results achieved, as well as the contact persons and projects involved in the biosphere reserve. Meetings between project staff, other project staff involved in the biosphere reserve, government ministries, and the press will be organised as appropriate and necessary. MAB National Committees will be responsible for the preparation of materials such as leaflets, wallcharts, and pedagogical kits with the assistance of scientific and education resource persons.
73. Training sessions and thematic workshops will be held at the regional level. Representatives from local communities, MAB National Committees, representatives from scientific institutions, managers of the biosphere reserves and project leaders will be invited to participate. Exchange visits amongst the biosphere reserves are planned between the park staff, local communities' representatives, MAB National Committees and national research students. Main activities will be presented in the AfriMAB network in French and English. Publications will be prepared (scientific articles, pedagogical kits, wallcharts, leaflets) and will be distributed via the MAB National Committees, the UNESCO National Commissions and UNESCO national and regional Offices.
74. The AfriMAB Network promotes the use of harmonised methodologies within the sub-region, fosters and facilitates collaboration among the participating countries and the teams of each site, and develops co-operation with other countries facing similar challenges for improving the protection of threatened savanna ecosystems. The project will demonstrate the role of biosphere reserves as sites for conservation and sustainable use of biodiversity, monitoring, environmental education and developing scientifically-based information for conservation management. Since the project sites include representative areas of arid lands, the results and lessons learned should be applicable in a wide range of drylands throughout Africa and globally. To this end, replication of the results will be facilitated through the AfriMAB network and the World Network of Biosphere Reserves.

2.7 STAKEHOLDER PARTICIPATION AND IMPLEMENTATION ARRANGEMENTS

75. The UNESCO/MAB Secretariat works in close collaboration with MAB National Committee and biosphere reserve managers in each country. MAB National Committees are responsible for the activities that comprise the national contribution of a country to the international Man and the Biosphere Programme (MAB) in the field of biodiversity conservation, sustainable development, capacity building and information sharing, and in particular in promoting the biosphere reserve concept, the World Network of Biosphere Reserves and the AfriMAB regional network. They have direct links to the appropriate ministries responsible for protected

area management, other line ministries, environment agencies, and scientific and technical institutions.

76. The government-designated MAB National Committees will act as focal points at the national level for the implementation of project activities in close co-operation with the management institution responsible for the biosphere reserve. At the cross-site level the UNESCO-MAB Secretariat will provide the necessary human and logistical infrastructure for planning and co-ordination. The MAB National Committees will be charged with co-ordinating the scientific and institutional activities in close collaboration with the biosphere reserve institutions and national universities. An international steering committee will be established to oversee the execution of the project. This international steering committee will meet three times, at the beginning of the project, in the middle of the project and once before the end of the project.
77. A project manager will be appointed and will work under the supervision of the Secretary of the MAB Programme. They will be in regular contact with MAB National Committees, biosphere reserves manager, and other UN and non-UN project co-ordinators (using electronic means, fax and meetings).
78. The UNESCO/MAB Secretariat and the project manager will ensure that all relevant stakeholders are informed about the outputs of the project. With the collaboration of MAB National Committee, the project manager will ensure that main results will be translated into local languages, through local media (radio), television and newspapers to inform the wider public of main outputs of the Project.
79. Annex 9E provides a full description of the implementation arrangements for the project at the regional and national levels and within each biosphere reserve.

SECTION 3 - WORKPLAN AND TIMETABLE, BUDGET AND FOLLOW-UP

3.1 Workplan and Time table

A detailed operational workplan and timetable can be found in Annex 2 which supplements the original timetable submitted to the GEF and which can be found in Annex 9B of this document. This is a separate attachment to the Project Document and is in Microsoft Project format. Adjustments to project start up dates will be made upon final signatures of this project document.

3.2 Budget

The grant will be used to finance the activities mentioned in Section 2. A detailed budget following UNEP format can be found in Annex 1 of this document. This budget is based upon the GEF approved budget provided in GEF format in Section 2.5, Table 5.

3.3 Follow-up

The proposed project will be implemented over a 4-year time frame. At the end of the four years, several outputs will ensure sustainability of the actions undertaken in the six countries and will encourage the follow-up of activities summarized below.

At the site level, one main follow-up will be the on-going inputs of the scientific community in the management plan through the establishment of formal procedures between national scientific research and training institutions and the management authorities of the biosphere reserves. The project will serve to demonstrate and establish the role of biosphere reserves as field sites for monitoring, environmental education and scientific research at the national level.

In addition, there will be a list of recognized mediators for each biosphere reserve who will also be called upon. This institutional recognition will ensure that all stakeholders have worked together and have established permanent institutional structures for dialogue and concertation. Thus an increase in trust and collaboration in the six biosphere reserves will be a key element for its sustainable management as well as permanent exchange between the scientific community and the managers of the biosphere reserves.

A second key element concerns economic and financial sustainability. Training in micro-enterprise development will be provided to local communities as well as testing of several economic activities for increased livelihoods (i.e eco-tourism, hunting, collecting new products, access to new resources, etc.). These benefits and socio-economic alternatives which will be explored in the project, including the creation of a trust fund for the biosphere reserve, will strengthen existing institutional structures for managing resources at the local level (local community institutions, coordination and management structure in the biosphere reserve) and at the national level (support to MAB National Committees, establishment of official linkages between research and training institutions and biosphere reserves as demonstration sites). Sustainable alternative economic activities will be on-going after the termination of the project.

Finally at the regional level, a strengthened and more effective sub-regional AfriMAB network will improve cooperation in the management of West African savanna and raise awareness of the importance of savanna ecosystems in the region. Staff of the biosphere reserves as well as the scientific community will keep in touch and continue exchanging information and experience. The focus of the project on strengthening individual and institutional capacity and on reinforcing the

institutional and scientific links between the countries and the biosphere reserves through an established network makes it a long-term investment in capacity development in the region.

SECTION 4 - INSTITUTIONAL FRAMEWORK AND EVALUATION

4.1 Institutional Framework

UNESCO MAB will be responsible for the implementation of the project in accordance with the objectives and activities outlined in Section 2 of this document. UNEP as the GEF Implementing Agency will be responsible for overall project supervision to ensure consistency with GEF and UNEP policies and procedures, and will provide guidance on linkages with related UNEP and GEF-funded activities.

The Division of UNEP DGEF Co-ordination will monitor implementation of the activities undertaken during the execution of the project.

The Division of UNEP DGEF Co-ordination will be responsible for clearance and transmission of financial and progress reports to the Global Environment Facility.

UNEP retains responsibility for review and approval of the substantive and technical reports produced in accordance with the schedule of work.

Project operational arrangements are detailed in full in Section 2.7 and in Annex 9E of this project document.

Prior to contracts, sub-contracts, or letters of agreement being entered into by UNESCO MAB, UNESCO MAB will submit to UNEP/DGEF Coordination copies of all these documents including the related terms of reference and statements of work. All of these documents will be submitted to UNEP/DGEF in English. Within 15 working days, UNEP/DGEF Coordination will review, provide guidance and give UNESCO MAB substantive clearance on the technical content of these contracts, sub-contracts and letters of agreement and their accompanying terms of reference and statements of work.

All correspondence regarding substantive and technical matters should be addressed to:

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With a copy to:

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Email: john.mukoza@unep.org

4.2 Evaluation

Every year, the UNEP Division of GEF Co-ordination will submit a Self Evaluation Report (SER) to measure the degree to which the objectives of the project have been achieved. This will be in addition to the standard mid-term and final evaluations of the project per standard UNEP procedures as outlined in Section 2.6 as well as supervision missions conducted by the UNEP Task Manager and other UNEP/DGEF staff as may be required. Please also See Annex 8 for the monitoring and evaluation plan.

SECTION 5 - MONITORING AND REPORTING

5.1 Management Reports

5.1.1 Progress Reports

Every six months, (as at 30 June and 31 December) for UNEP Progress Reports, UNESCO shall submit to UNEP, with a copy to Division of GEF Coordination, using the formats given in Annex 6A semi-annual reports on the progress in project execution, within 30 days of the end of the reporting period.

The Inventory of Outputs /Services should be submitted with all Progress Reports and the Terminal Report. The report is due within 30 days of the end of each half-yearly period when submitted with a Progress Report or within 60 days of the completion of a project when submitted with a Terminal Report.

The format of the report is given in Annex 6B. The Semi-Annual progress reports will include an updated logframe (Logframe Tracking Tool), which will identify the established baselines at project start-up and achievements in reaching target indicators as of that reporting period. The Logframe Tracking Form is included as part of Annex 6C.

5.1.2 Terminal Reports

Within 60 days of the completion of the project, UNESCO will submit to Chief, Budget and Financial Management Service, with a copy to UNEP/DGEF Coordination, a Terminal Report detailing the activities taken under the project, lessons learned and any recommendations to improve the efficiency of similar activities in the future, using the format provided in Annex 7.

5.1.3 Substantive Reports

(i) At the appropriate time, UNESCO will submit to UNEP three copies in draft of any substantive project report(s) and, at the same time, inform UNEP of its plans for publication of that text. UNEP will give UNESCO substantive clearance of the manuscript, indicating any suggestions for change and such wording (recognition, disclaimer, etc.) as it would wish to see figure in the preliminary pages or in the introductory texts.

(ii) It will equally consider the publishing proposal of UNESCO and will make comments thereon as advisable.

(iii) It may request UNESCO to consider publication on a joint imprint basis. Should UNESCO be solely responsible for publishing arrangements, UNEP will, nevertheless, receive 10 free copies of the published work in each of the agreed languages, for its own purposes. All publications emanating from the project will carry UNEP, GEF and wherever applicable, logos of other cooperating agencies and supporting organizations.

5.2 Financial Reports

UNESCO shall submit to UNEP quarterly project expenditure accounts and final accounts for each project, showing amount budget for the year, amount expended since the beginning of the year as follows:

- (i) Details of project expenditures will be reported on an activity-by-activity basis, in line with project budget codes as set out in the project document. Reports are due as at 31 March, 30 June, 30 September and 31 December using the format given in Annex 4. All expenditure accounts will be dispatched to UNEP within 30 days of the end of the

quarter to which they refer, certified by a duly authorised official of UNESCO.

(ii) The expenditure accounts as at 31 December will be received by UNEP by 15 February each year.

(iii) A final statement of account, in line with UNEP project budget codes reflecting actual final expenditure under the project, when all obligations have been liquidated

Within 30 days of the reporting period, UNESCO shall submit to UNEP GEF Coordination Office, a cofinancing report for the project as at 30 June and 31 December, using the format provided in Annex 4A showing:

- (a) Amount of cofinancing realized compared to the amount of cofinancing committed to at the time of project approval, and
- (b) Cofinancing reporting by source and by type.
 - ◆ Sources include the agency's own cofinancing, government cofinance (counterpart commitments), and contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector, and beneficiaries.
 - ◆ Types of cofinance. Cash includes grants, loans, credits and equity investments. In-kind resources are required to be:
 - dedicated uniquely to the GEF project,
 - valued as the lesser of the cost and the market value of the required inputs they provide for the project, and monitored with documentation available for any evaluation or project audit.

5.3 Terms and Conditions

5.3.1 Non expendable equipment

UNESCO will maintain records of non-expendable equipment (items costing US\$1500 or more as well as items of attraction such as pocket calculators, cameras, computers, printers, etc.) purchased with UNEP funds (or with Trust Funds or Counterpart funds administered by UNEP) and will submit, using format in Annex 5, an inventory of such equipment to UNEP, every year as at 31 December, indicating description, serial no., date of purchase, original cost, present condition, location of each item attached to the progress report submitted on 31 December. Within 60 days of completion of the project, UNESCO will submit to UNEP a final inventory of all non-expendable equipment purchased under this project indicating description, serial number, original cost, present condition, location and a proposal for the disposal of the said equipment. Non-expendable equipment purchased with funds administered by UNEP remains the property of UNEP until its disposal is authorised by UNEP, in consultation with UNESCO. UNESCO shall be responsible for any loss or damage to equipment purchased with UNEP administered funds. The proceeds from the sale of equipment (duly authorised by UNEP) shall be credited to the accounts of UNEP, or of the appropriate trust fund or counterpart funds

5.3.2 Responsibility for Cost Overruns

Any cost overruns (expenditures in excess of the amount in each budget sub-line) shall be met by the organisation responsible for authorising the expenditure, unless written agreement has been received in advance from UNEP. In cases where UNEP has indicated its agreement to a cost overrun in a budget sub-line to another, or to increase the total cost to UNEP, a revision to the project document amending the budget will be issued by UNEP.

5.3.3 Claims by Third Parties against UNEP

UNESCO shall be responsible for dealing with any claims which may be brought by third parties against UNEP and its staff, and shall hold UNEP and its staff non-liaible in case of any claims or liabilities resulting from operations carried out by UNESCO or other project partners under this project document, except where it is agreed by UNESCO and UNEP that such claims or liabilities arise from gross negligence or wilful misconduct of the staff of UNEP.

5.3.4 Cash Advance Requirements

Initial cash advance of US\$ 803,000 will be made upon signature of the project document by both parties and will cover expenditures expected to be incurred by UNESCO during the first four months of the project implementation. Subsequent advances are to be made quarterly, subject to:

- (i) Confirmation by UNESCO at least two weeks before the payment is due, that the expected rate of expenditure and actual cash position necessitate the payment, including a reasonable amount to cover "lead time" for the next remittance; (see format of request in Annex 3) and
- (ii) The presentation of:
 - a satisfactory financial report showing expenditures incurred for the past quarter, (see format in Annex 4) under each project activity and
 - timely and satisfactory progress reports on project implementation.

Requests for subsequent cash advances should be made using the standard format provided in Annex 3.

5.3.4 Publications

For publications issued with the executing agency, both the cover and the title page of the publication will carry the logos of UNEP and GEF, and the title of the United Nations Environment Programme, together with that of the Executing Agency and, wherever applicable, those of the cooperating agencies and supporting organizations. The Executing Agency will submit three copies of any manuscript prepared under the project for clearance prior to their publication in final form. UNEP's views on the publication and any suggestions for amendments of wording will be conveyed expeditiously to the Executing Agency, with an indication of any disclaimer or recognition which UNEP might wish to see appear in the publication

5.3.6 Amendments

The Parties to this project document shall approve any modification or change to this project document in writing.

LIST OF ANNEXES

- ANNEX 1: Budget in UNEP Format (attached as separate Excel file)
- ANNEX 2: Workplan and Timetable (attached as separate Microsoft Project File)
- ANNEX 2A Terms of Reference for Project Staff and Steering Committee
- ANNEX 3: Format for Cash Advance Statement
- ANNEX 4: Format for Quarterly Project Expenditures Account for Co-operating Agencies
- ANNEX 4A: Format for UNEP/GEF Report on Planned Project Cofinance and Actual Cofinance Received
- ANNEX 5: Format for UNEP Inventory of Non-expendable Equipment
- ANNEX 6: A. Format for Half-yearly Progress Report to UNEP
B. Format for Inventory of Outputs/Services
C. Logframe Tracking Tool
- ANNEX 7: Format for Terminal Report
- ANNEX 8: Monitoring and Evaluation Plan
- ANNEX 9: All Annexes from the GEF Project Proposal
- ANNEX 10. Cofinancing Summary Table and Cofinancing Letters (Separate PDF Attachment)
- ANNEX 11. Response to GEF Council Member Comments

ANNEX 1: BUDGET IN UNEP FORMAT (attached as separate file)

ANNEX 2: WORKPLAN AND TIMETABLE (attached as separate Microsoft Project file)⁷

⁷ National level work plans for 2004 and tentative work plans for the remaining years of the project (2005-2007) will be submitted in English to UNEP DGEF within one month after the first project steering committee scheduled to be held in January 2004. In subsequent years of the project, an annual national level work plan will also be submitted by January 31 for each year of the project, i.e., 2005, 2006, and 2007. The national work plans will be individual to each country and reflect activities being conducted within each country specific to each Biosphere Reserve and the national situation of each country. Within 15 working days, UNEP/DGEF Coordination will review, provide guidance and give UNESCO MAB substantive clearance of these national level work plans.

ANNEX 2A TERMS OF REFERENCE FOR PROJECT STAFF⁸

Part time Administrative Assistant (G 4 level)

Under the supervision of the Project Officer, the incumbent is entrusted with the following tasks:

- 2) Assist the Project Officer in the budget administration of the project by :
 - a) Maintain all relevant budget records such as receipt of funds, budget revision, allotments of funds, monthly accounts and financial reports in order to control the timely availability of funds for execution of project activities;
 - b) Contributing to the preparation of periodical reviews of all project activities of the unit and budget updates in conformity with the approved project documents;
 - c) Coordinating contacts as required and in consultation with the Administrative unit of the Science Sector liaise with all relevant UNESCO services.

- 2) Assist in the financial administration of the project by :
 - a) Preparing purchase order, contracts, missions, administer meetings and submitting for approval to the Administrative unit of the Science sector all relevant financial documents along with justifications such as budget estimates, lists of participants, travel orders, proforma invoice; perform systematic follow up of outstanding obligations and ensure their timely liquidation ;
 - b) Participating in the follow-up and the liquidation of all financial documents in particular, producing periodic review of all unliquidated contracts;
 - c) Prepare quarterly progress reports of financial nature as requested by UNEP and GEF.

- 3) Perform any other duties as required.

Steering Committee

The Steering Committee will be composed of:

- Director of Division of Ecological Sciences
- Project Officer
- The six managers of the biosphere reserves
- Three international experts in the field of biodiversity, management of resources and biosphere reserves identified by UNESCO-MAB;
- UNEP/Division of GEF Coordination Representative.

⁸ More detailed Terms of Reference (TOR) for each position and for all consultants and Statements of Work (SOW) for each committee (Steering Committee and MAB National Committees) and for each organization (Scientific Centres) and other organizations will be submitted in English and subject to approval by UNEP GEF within one month after first project steering committee to be held in January 2004. UNEP/DGEF Coordination will review, provide guidance and give UNESCO MAB substantive clearance of these national level work plans within 15 working days after receiving them. Consultant and position TOR and organization SOW not yet identified within this project document will be subject to the same review and approval process by UNEP DGEF.

Representatives from other institutions may be invited as observers or advisors.

The Steering Committee will provide scientific and technical guidance to the project on the three components. It will assist the Project Officer and his team in maintaining and developing linkages with other on-going and planned projects, in order to ensure sustainability of the activities undertaken and the visibility of the project work. It will inform the Project Officer and its team about problems that may emerge, and suggest possible modifications of the work plan accordingly for the succeeding year. It will monitor progress on the regional aspects of the project, i.e. building of common interaction indicators as well as the regional training activities and the regional communication strategy on biosphere reserves. It will validate the scientific outputs and the recommendations made during the scientific and technical workshops. It will also provide information and advice to the Project Officer on potential additional funding sources. The Steering Committee members will also advise the Project Officer on ways to reinforce cooperation between the project and other complementary initiatives. It will provide overall guidance for the project implementation.

The steering Committee will meet once a year, in UNESCO Headquarters and UNESCO field offices. Teleconferences and email will be used to maintain high level of communications.

Consultants

Several international consultants and experts will be hired periodically during the project to assist the project management team and the six countries in the implementation of the activities for the three components of the project. The consultants will be entrusted with the following tasks:

a) Biodiversity and interaction indicators

Tasks:

- Provide an in-depth overview of existing biodiversity indicators for the biosphere reserve managers and national scientific teams in the six sites;
- Assist the six countries and collaborate with the six national scientific teams in designing interaction indicators as specified in the project document
- Test the indicators in the six sites,
- Prepare a comparative analysis of the indicators used in the six biosphere reserves;
- Identify common issues and opportunities for collaborative learning and exchange;
- Prepare scientific material to be published in articles, journals and books;
- Contribute to the organization of regional scientific seminars on these issues.

Qualifications

- Advance university degree (PhD or Master's) in economics related to biodiversity issues;
- Minimum of three years research experience on biodiversity, including work on indicators;
- Willingness and ability to travel frequently to all six countries;
- Ability to work in an interdisciplinary scientific team; and
- Ability to work with stakeholder interest groups.

b) Conflict prevention and management

Tasks

Provide guidance on conflict management and prevention in the six countries with a view to improving biosphere reserve management: in particular,

- build on the descriptive analysis of constraints and potentialities made in each site for effective participation of stakeholders in the management of the site through institutional mechanisms;
- contribute to national and regional training workshops on conflict prevention and mediation in the six sites;
- prepare a comparative analysis of the approaches existing in the six biosphere reserves for conflict prevention and mediation and
- identify common issues and opportunities for collaborative learning and exchange;
- prepare scientific material to be published in articles, journals, methodological guide and book.

Qualifications

- Advance university degree (PhD or Master's) in social sciences, related to conflict issues and mediation;
- Minimum of three years research experience on conflict management with experience in training on conflict prevention and management, including in developing countries;
- Willingness and ability to travel frequently to all six countries;
- Ability to work in an interdisciplinary scientific team; and
- Ability to work with stakeholder interest groups.

c) Socio-economics and institutional

Tasks

Provide support and guidance to the countries in the area of socio-economics in order to implement activities planned in the three components of the project: in particular,

- assist the countries and collaborate with the managers, MAB National Committees, local community representatives and other key stakeholders in designing collaborative management approaches and testing alternative economic activities;
- contribute to the testing of the sustainability of ecosystems and of local communities through innovative socio-economic and institutional mechanisms;
- contribute to national and regional training workshops on these issues;
- prepare a comparative analysis of the results in the six biosphere reserves and identify common issues and opportunities for collaborative learning and exchange;
- prepare scientific material to be published in articles, journals, methodological guide and books.

Qualifications

- Advance university degree (PhD or Master's) in socio-economics and/or institutional economics, with particular reference to biodiversity issues;
- Minimum of five years research experience related to biodiversity and good field experience, preferably in developing countries;
- Willingness and ability to travel frequently to all six countries;
- Ability to work in an interdisciplinary scientific team; and
- Ability to work with stakeholder interest groups.

d) Anthropology and social sciences

Tasks

Provide support to countries in anthropology and social sciences to implement activities planned in components One and Two of the project: in particular,

- assist the countries and collaborate with the six national scientific teams in designing social sciences training courses and scientific research methodology to be applied in the six biosphere reserves,
- substantiate biodiversity knowledge of local communities, to study local representations of nature and local knowledge on fauna and flora and technical know-how, as well as the main constraints encountered by local communities;
- contribute to national and regional training workshops on these issues in the six sites;
- prepare a comparative analysis of the approaches in the six biosphere reserves for including traditional knowledge in the management plan and in the building of the scientific indicators;
- identify common issues and opportunities for collaborative learning and exchange;
- prepare scientific material to be published in articles, journals, methodological guide and book.

Qualifications

- Advance university degree (PhD or Master's) in social sciences;
- Minimum of five years research experience, including demonstrated field experience preferably in developing countries;
- Willingness and ability to travel frequently to all six countries;
- Proven ability to work in an interdisciplinary scientific team; and
- Proven ability to work with stakeholder interest groups.

e) Communication and information

Tasks

- Provide assistance for a publication and communication strategy, including editing and preparation of scientific materials to be published with a view to raising environmental awareness of savanna ecosystem and biosphere reserves in West Africa and
- Valorize the scientific and field results of the project to a wider audience.

Qualifications

- Advance university degree (PhD or Master's) in scientific aspects of biodiversity or in communication and information linked to biodiversity;
- Minimum of five years experience in communication and information on biodiversity issues; and
- Ability to work in an interdisciplinary scientific team.

TOR, Statements of Work, and Consultants for each country:

MAB National Committees

Under the supervision of the Project management team, the MAB National Committee will be entrusted with the following tasks:

- Oversee and lead the co-ordination effort at the national level;
- Undertake permanent consultations with key stakeholders at the national level and particularly the ministries and institutions responsible for environment matters and scientific research, the biosphere reserve staff and the national scientific teams.
- Undertake permanent close consultation with on-going and planned projects (GEF and non GEF) in the country to ensure that project activities are fully complementary to ongoing and planned initiatives;
- Convene national meetings for information and coordination of activities at the national level;
- Facilitate communication and information exchange between the various stakeholders;
- Participate in the institutional efforts in each site for improving the co-ordination of activities in the biosphere reserve;
- Secure co-financement during and beyond the implementation of the project;
- Elaborate a national strategy for communication and information on the biosphere reserve and on the activities undertaken during the project for a large public in the country, using the appropriate media;
- Produce national reports based on the activities implemented in each country;
- Participate in the regional activities and in the exchange of information at the regional level particularly through internet and the regional publications.

Biosphere Reserve co-ordinator

- Provide basic equipment and access to e-mail and internet in each biosphere reserve;
- Participate in the establishment of mechanisms for improving co-ordination structure in the biosphere reserve;
- Facilitate the integration of community participation in these co-ordination structures;
- Provide training to the biosphere reserve staff in the identified fields;
- Provide support to the organization of local meetings for exchange of information;
- Participate in the scientific surveys undertaken by the national scientific team;
- Participate in the elaboration of the national technical and scientific report in close collaboration with the national scientific teams and the MAB National Committee;

- Participate in the national information and coordination meetings convened by the MAB National Committee;
- Provide information to concerned stakeholders on projects and activities which are complementary to the project, including potential source of co-financement;
- Participate in the regional activities.

Local Community Representative

- Provide training for local populations in the defined areas;
- Provide support for the organization of local meetings for exchange of information;
- Provide support to the organization of cross-site visits;
- Participate in the demonstration site activities with the scientific national team and
- Participate in the regional activities.

Scientific centres

- Provide basic equipment and access to e-mail and internet;
- Implement research activities described in component One and Two of the project for the four years;
- Identify resource persons to build the national scientific team;
- Provide field training for national and local university students and masters students in the biosphere reserve, in close cooperation with the BR staff;
- Develop a scientific database, update and facilitate its permanent use;
- Support the establishment of formal co-operative links between scientific centres and the biosphere reserve;
- Publish and prepare scientific materials on research results and produce information for managers of the biosphere reserve; and
- Participate in the regional activities.

ANNEX 3: CASH ADVANCE STATEMENT

Statement of cash advance as at
 And cash requirements for the quarter of

Name of cooperating agency /
 Supporting organization _____
 Project No. _____
 Project title _____

I. Cash statement

1. Opening cash balance as at US\$ _____
 2. Add: cash advances received:

Date	Amount
.....
.....
.....
.....

3. Total cash advanced to date US\$ _____
 4. Less: total cumulative expenditures incurred US\$ (_____)
 5. Closing cash balance as at US\$ _____

II. CASH REQUIREMENTS FORECAST

6. Estimated disbursements for quarter
 ending US\$ _____
 7. Less: closing cash balance (see item 5, above) US\$ (_____)
 8. Total cash requirements for the
 quarter US\$ _____

Prepared by _____ Request approved by _____

Duly authorised official of cooperating agency/ supporting organisation

ANNEX 4: FORMAT FOR QUARTERLY PROJECT EXPENDITURE ACCOUNTS FOR COOPERATING AGENCIES

Quarterly project statement of allocation (budget), expenditure and balance (Expressed in US\$) covering the period

..... To

Project No:..... Agency Name:

Project Title:

Project Commencing: Project Ending:

(date)

(date)

Object of expenditure by UNEP budget code	Project budget allocation for year		Total expenditure for quarter	Total unliquidated obligations*	Cumulative expenditure for year	Unspent balance of budget allocation for year	
	m/m (1)	Amount (2)	(3)	(4)	(5)	m/m (6)	Amount (2)-(5)
1100 Project Personnel							
1200 Consultants							
1300 Administrative support							
1400 Volunteers							
1600 Travel							
2100 Sub-contracts							
2200 Sub-contracts							
2300 Sub-contracts							
3100 Fellowships							
3200 Group training							
3300 Fellowships							
4100 Expendable equipment							
4200 Non-expendable equipment							
4300 Premises							
5100 Operation							
5200 Reporting costs							
5300 Sundry							
5400 Hospitality							
5401							
99 GRAND TOTAL							

*See breakdown of unliquidated obligations, by object of expenditure attached as Annex.....

Signed: _____

Duly authorized official of cooperating agency

NB: The expenditure should be reported in line with the specific object of expenditures as per project budget.

ANNEX 4A
UNEP/GEF REPORT ON PLANNED PROJECT COFINANCE AND ACTUAL COFINANCE RECEIVED
 (report required as at 30 June and 31 December during project execution)

Title of Project:							
Project Number:		PMS:GF/			IMIS:GFL-		
Name of Executing Agency:							
Project Duration:		From:			To:		
Reporting Period:							
Source of Cofinance	Cash Contributions			In-kind Contributions			Comments Received to date
	Budget original	Budget latest revision	Received to date	Budget original	Budget latest revision	Received to date	
<i>Additional Cofinance: -</i>							
Total	0	0	0	0	0	0	
<i>All amounts in US dollars</i>							
Name:							
Position:							
Date:							

ANNEX 6A Format for UNEP Half-yearly Progress Report

As at 30 June and 31 December

(Please attach a current inventory of outputs/Services when submitting this report)

1. Background Information

1.1 Project Number:

1.2 Project Title:

1.3 Division/Unit:

1.4 Coordinating Agency or Supporting Organization (if relevant):

1.5 Reporting Period (the six months covered by this report):

1.6 Relevant UNEP Programme of Work (2002-2003) Subprogramme No:

1.7 Staffing Details of Cooperating Agency/ Supporting Organization (Applies to personnel / experts/ consultants paid by the project budget):

Functional Title	Nationality	Object of Expenditure (1101, 1102, 1201, 1301 etc..)

1.8 Sub-Contracts (if relevant):

Name and Address of the Sub-Contractee	Object of expenditure (2101, 2201, 2301 etc..)

2. Project Status

2.1 Information on the delivery of outputs/services

	Output/Service (as listed in the approved project document)	Status (Complete/ Ongoing)	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions to be taken
1.				
2.				
3.				

2.2 If the project is not on track, provide reasons and details of remedial action to be taken:

3. Discussion acknowledgment (To be completed by UNEP)

Project Coordinator's General Comments/Observations	First Supervising Officer's General Comments
Name: _____ Date: _____ Signature: _____	Name: _____ Date: _____ Signature: _____

Annex 6B Half-Yearly Progress Report: Format for Inventory of Outputs/Services

a) Meetings (UNEP-convened meetings only)

No	Meeting Type (note 4)	Title	Venue	Dates	Convened by	Organized by	# of Participants	List attached Yes/No	Report issued as doc no	Language	Dated
1.											
2.											
3.											

List of Meeting Participants

No.	Name of the Participant	Nationality

b) Printed Materials

No	Type (note 5)	Title	Author(s)/Editor(s)	Publisher	Symbol	Publication Date	Distribution List Attached Yes/No
1.							
2.							
3.							

c) Technical Information / Public Information

No	Description	Date
1.		
2.		
3.		

d) Technical Cooperation

No	Type (note 6)	Purpose	Venue	Duration	For Grants and Fellowships		
					Beneficiaries	Countries/Nationalities	Cost (in US\$)
1.							
2.							

e) Other Outputs/Services (e.g. Networking, Query-response, Participation in meetings etc.)

No	Description	Date
1.		
2.		
3.		

Note 4 Meeting types (Inter-governmental Meeting, Expert Group Meeting, Training Workshop/Seminar, Other)

Note 5 Material types (Report to Inter-governmental Meeting, Technical Publication, Technical Report, Other)

Note 6 Technical Cooperation Type (Grants and Fellowships, Advisory Services, Staff Mission, Others)

ANNEX 6C LOGFRAME TRACKING TOOL

I. Purpose of Logframe Tracking Form

The purpose of the Logframe Tracking Form (LTF) is to assess progress in project implementation against the indicators described in the Project Document logframe matrices. The form itself is not included in the Project Document; it was developed by the as a performance management tool for tracking and reporting progress in achieving outputs and outcomes.

II. Design and Use of the Logframe Tracking Form

A staff member should be assigned responsibility for preparing the semi-annual LTF. The report must be reviewed and approved by the UNESCO Project Officer. His/her approval must be stated in the text of the transmitting email message in the form of:

“Mr/Ms Name, UNESCO Project Officer, has reviewed and approved the (INSERT DATE) Semi-Annual Logframe Tracking Form”

III. Explanation of Columns

Narrative Summary – As stated in the logframe matrices in Annex 9B of the UNEP/GEF Project Document (and reflecting any approved revisions to this annex).

Objectively Verifiable Indicators – As stated in the logframe matrices in Annex 9B of the UNEP/GEF Project Document (and reflecting any approved revisions to this annex).

Baseline Date and Value – As stated in the logframe matrices in Annex 9B of the UNEP/GEF Project Document (and reflecting any approved revisions to this annex). The baseline date should be set for the start of the Full Project), unless additional time is needed to conduct survey work in order to obtain the baseline values. In some cases, the baseline is linked to site management plans, in which case it can only be determined after the management plan has been completed (indicate when this will be).

Means of Verification – As stated in the logframe matrices in Annex 9B of the UNEP/GEF Project Document (and reflecting any approved revisions to this annex). Please modify the Means of Verification entries as necessary to show the ACTUAL sources of information to be used to verify any changes in indicator values for each report.

Achievement Status as of Report Date – UNESCO Project to complete this column to reflect the changes in indicator values in relation to project implementation progress on a semi-annual basis to coincide with the preparation of the UNEP and GEF progress reports.

IV. File Retention

Semi-annually the PMU should print out hard-copy versions of its LTF and file it and make back-up digital copies on a disk. The working file will remain on an office computer, but in the event of file corruption, fire, etc., the back-up copies will be available. The back-up disk should be kept in a separate location from the computer copy.

Building Scientific and Technical Capacity for Effective Management and Sustainable Use of Dryland Biodiversity in West African Biosphere Reserves
 UNEP Project Document GF/

(Logframe Tracking Form)

Building Scientific and Technical Capacity for Effective Management and Sustainable Use of Dryland Biodiversity in West African Biosphere Reserves Logical Framework Tracking Form

Report Date:

Narrative Summary (Intervention Logic)	Objectively Verifiable Indicators	Means of Verification	Baseline Date & Value		Achievement Status as of Report Date
Development objective(s)					
Immediate Objective(s)					
Project Outputs					

Prepared by:

Date:

Reviewed by:

Date:

Certified: Mr/Ms Name, UNESCO Project Officer has reviewed and approved the "INSERT DATE" Logframe Tracking Form

ANNEX 7: FORMAT FOR TERMINAL REPORT

TERMINAL REPORT (For External Projects Only)

Implementing Organization _____

Project No. _____

Project Title: _____

1. Project Needs and Results

Re-state the needs and results of the project.

2. Project activities

Describe the activities actually undertaken under the project, giving reasons **why some activities were not undertaken, if any.**

3. Project outputs

Compare the outputs generated with the ones listed in the project document.

List the actual outputs **produced but not included in previous Progress Reports** under the following headings
(Please tick appropriate box)

(a) **MEETINGS** (UNEP-convened meetings only)

Inter-governmental (IG) Mtg. Expert Group Mtg. Training Seminar/Workshop Others

Title: _____

Venue and dates _____

Convened by _____ Organized by _____

Report issued as doc. No/Symbol _____ Languages _____ Dated _____

For Training Seminar/Workshop, please indicate: No. of participants _____ and attach **annex** giving names and nationalities of participants.

(b) **PRINTED MATERIALS**

Report to IG Mtg. Technical Publication Technical Report Others

Title: _____

Author(s)/Editor(s) _____

Publisher _____

Symbol(UN/UNEP/ISBN/ISSN) _____

Date of publication _____

(When technical reports/publications have been distributed, attach **distribution list**)

<p>(c) TECHNICAL INFORMATION</p> <p>Description _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Dates _____</p>	<p>PUBLIC INFORMATION</p>
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<p>(d) TECHNICAL COOPERATION</p> <p>Grants and Fellowships Advisory Services</p> <p>Staff Missions Others (describe)</p> <p>Purpose _____</p> <p>_____</p> <p>Place and duration _____</p> <p>For Grants/Fellowships, please indicate:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Beneficiaries</th> <th style="width: 33%;">Countries/Nationalities</th> <th style="width: 33%;">Cost(in US\$)</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>			Beneficiaries	Countries/Nationalities	Cost(in US\$)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Beneficiaries	Countries/Nationalities	Cost(in US\$)															
_____	_____	_____															
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<p>(e) OTHER OUTPUTS/SERVICES</p> <p>For example, Networking, Query-response, Participation in meetings etc.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

4. **Use of outputs**
State the use made of the outputs.
5. **Degree of achievement of the objectives/results**
On the basis of facts obtained during the follow-up phase, describe how the project document outputs and their use were or were not instrumental in realizing the objectives/results of the project.
6. **Conclusions**
Enumerate the lessons learned during the project execution. Concentrate on the management of the project, indicating the principal factors which determined success or failure in meeting the objectives set down in the project document.
7. **Recommendations**
Make recommendations to:
 - (a) Improve effect and impact of similar projects in the future;
 - (b) Indicate what further action might be needed to meet the project objectives/results.
8. **Non-expendable equipment (value over US\$1,500)**
Please attach to the terminal report a final inventory of all non-expendable equipment (if any) purchased under this project, indicating the following:
Date of purchase, description, serial number, quantity, cost, location and present condition, together with your proposal for the disposal of the said equipment.

ANNEX 8 MONITORING, PROGRESS REPORTING, AND EVALUATION PLAN

The objective of monitoring and evaluation is to assist all project participants in assessing project performance and impact, with a view to maximizing both. Monitoring is the continuous or periodic review and surveillance by management of the implementation of an activity to ensure that all required actions are proceeding according to plan. Evaluation is a process for determining systematically and objectively the relevance, efficiency, effectiveness and impact of the activities in light of their objectives. Ongoing evaluation is the analysis, during the implementation phase, of continuing relevance, efficiency and effectiveness and the present and likely future outputs, effects and impact.

The general and specific objectives of the project, and the list of its planned outputs, have provided the basis for this M&E plan.

The project will be evaluated on the basis of execution performance, output delivery, and project impact (outcomes per the project logframe.)

Execution performance. Execution monitoring will assess whether the management and supervision of project activities is efficient and seek to improve efficiencies when needed so as to improve overall effectiveness of project implementation. It is a continuous process, which will collect information about the execution of activities programmed in the annual workplans (See Annex 2), advise on improvements in method and performance, and compare accomplished with programmed tasks. This activity will be the direct responsibility of the Project Management Unit (PMU), under the supervision of the Steering Committee. See Table 1 for the execution performance indicators. The UNEP Task Manager will, in collaboration with the PMU, track these indicators.

Table 1: Indicators for Evaluating Whether Project Management Unit and Steering Committee are Effectively Operational

Indicator	Means of Verification ⁹
Half-yearly and annual activity and progress reports are prepared in a timely and satisfactory manner	Arrival of reports to UNEP
Quarterly expenditure reports are prepared in a timely and satisfactory manner.	Arrival of reports to UNEP
Performance targets, outputs, and outcomes are achieved as specified in the annual work plans.	Semi annual and Annual progress reports
Deviations from the annual work plans are corrected promptly and appropriately. Requests for deviations from approved budgets are submitted in a timely fashion.	Work plans, minutes of SC meetings, timely submission of revised budget to UNEP for approval
Disbursements are made on a timely basis, and procurement is achieved according to the procurement plan. Report on the procurement of non-expendable equipment against the project budget filed in a timely manner. Audit reports and other reviews showing sound financial practices.	IMIS system at UNEP and Bank Account statements of executing agency Inventory of Non-Expendable Equipment reports Audit statements
Steering Committee (SC) is tracking implementation progress and project impact, and providing guidance on annual workplans and fulfilling TOR. SC is providing policy guidance, especially on achievement of project impact.	Minutes of SC meetings Minutes of SC meetings

⁹ The responsible officer to track this will be the GEF project task manager in consultation with the project manager.

Delivered outputs. Ongoing monitoring will assess the project's success in producing each of the programmed outputs, both in quantity and quality. Internal assessment will be continuously provided by the PMU, and mid-term and final evaluations of outputs will be carried out by external consultants contracted by UNEP. See Table 2 for a summary of expected outputs by project component, and Annex 2 (Project Workplan and Timetable) for a detailed list of project activities and corresponding outputs.

Table 2: Description and timing of expected outputs by project component

Project Components	Outputs	Dates expected
Component One	Case studies Scientific articles Book and methodological guide, 2 PhD students in each country 16 Master students Operational Database	2005,2006,2007 2005,2006,2007 2007 2007 each year 2005
Component two	Interaction Indicators List of alternative economic activities Adoption of new economic activities Cooperation agreement with various key actors at local and national levels	End 2004 2004 2005,2006 2006, 2007
Component three (national level)	National trainings for local communities National training for Staff of BR Field training for scientific experts Communication and information strategy in each country National strategies on securing financial support, including Trust Fund surveys for each Biosphere reserve Material for school and for public National TV programmes, radio etc.. Institutional mechanisms for better coordination	2004,2005,2006 2004,2005, 2006 2004-2007 2005 2004, 2005 2005 and 2006 2005, 2006, 2007 2005 and 2006
Component three (regional level)	4 Regional training workshops/scientific meetings Internet web page of Afrimab sub regional network Publications on scientific results, thematic issues, case studies	2003, 2004,2005,2006 2004 2004,2005,2006,2007

Project impact. Evaluation of the project’s success in achieving its outcomes will be monitored continuously throughout the project through semi-annual progress reports, annual summary progress reports, a mid-term and final evaluation all of which will use the project logframe as a monitoring, evaluation, and reporting tool (See Project Logframe in Annex 9 B.). Table 3 presents the key performance indicators. Methods of data collection must strive to ensure that reliable baseline data is collected and that data is collected regularly throughout project implementation. The list of performance indicators should also include interim indicators and numerical targets with timeframes. The UNEP task manager will work closely together with the project officer to complete this task.

Table 3. List of Key Performance Indicators

	Key performance indicator	Baseline (if baseline is not known, please identify how and when baseline will be established)	Method of data collection/Data collection strategy (including frequency)
Goal	<p>Status of indicator species for each individual biosphere reserve remains steady. (Elephants (Boucle du Baoule, Pendjari and Niokolo Koba Biosphere Reserves, Giraffes (“W” Biosphere Reserve, Hippotamus (Mare aux Hippopotamus), Savanna buffalo (Comoe Biosphere Reserve) Hippotragues (<i>Hippotragus equinus</i>) in Pendjari and Comoé Biosphere Reserve.</p> <p>Basal coverage of vegetation and diversity of vascular plants remains steady.</p>	<p>For wildlife species: Baseline based on aerial survey made by the Ecopas project in January 2003 for Benin, Burkina Faso and Niger</p> <p>Baseline to be established in 2004 for Mali, Burkina Faso and Senegal</p> <p>For vegetation : Baseline established at year One</p>	<p>Monitoring will be done at year 2 and year 4, compared to baseline information collected in year 1 (i.e 2003).</p> <p>Baseline established at year 1, transect surveys</p>

	Key Performance Indicator	Baseline (if baseline is not known, please identify how and when baseline will be established)	Method of data collection/Data collection strategy (including frequency)
Immediate Objective	Implementation indicators of the Seville Strategy (See Annex I for implementation indicators to be used at national reserve level.) Improvement in management effectiveness of core area using the IUCN/WB protected area management scorecard. Baseline established at project initiation	Baseline established year 1 Baseline established at project initiation	Periodic review report + surveys results of component Two (results in year 2 and 3 of the project) Surveys

Outcome One	Key performance indicator	Baseline (if baseline is not known, please identify how and when baseline will be established)	Method of data collection/Data collection strategy (including frequency)
	Population dynamics of key species and condition of key habitats understood by the end of year 3	Baseline established year 1	Field surveys
	Human pressure indicators developed and applied by year one. These will include impacts of agriculture, pastoralism, fishing, plant collecting, firewood collecting, and hunting on biodiversity.	Baseline established year 1	Building of indicators as planned in output 2, using date of component 1
	Twenty % increase in the number of users of the database for scientific and management purposes (Database usage baseline established at year 2).	Baseline established at year 2 (creation and updating of database)	Surveys

Outcome Two	Key performance indicator	Baseline (if baseline is not known, please identify how and when baseline will be established)	Method of data collection/Data collection strategy (including frequency)
	Increase in income due to sustainable resource use strategies adopted by test villages at demonstration sites. Baseline established at year one and the target for percentage increase of income will be defined for each project site at end of year one. (Fish farming in the regions of Tiawassage and Porga in Pendjari Biosphere Reserve, collection of medicinal plants in two villages in Mare aux Hippopotames Biosphere Reserve, development of ecovillages in Comoé Biosphere Reserve, commercialization of non wood forest products in Darouma region of Boucle du Baoulé Biosphere Reserve, Craft industry in two villages of the “W” Biosphere Reserve in Niger and in transition zone Niokolo Koba Reserve).	Baseline established year 1	Socio-economic surveys (Component 1 and 2)
	Adoption of sustainable resource-use strategies by 3 villages outside of target demonstrations sites in each biosphere reserve by year 3 of the project. Reduction of incursions in the core area of each biosphere reserve (Baseline established at year 1, 10 -15% decrease in incursion in the core areas at end of year 4).	Baseline established Year 1	Socio-economic surveys Socio economic surveys and reports from BR staff
Outcome Three	<ul style="list-style-type: none"> • Number of signed Memorandum of Understanding between national scientific institutions and the biosphere reserve management institution • Increase in the number of agreements signed between representatives of local communities and biosphere reserve staff defining rights and duties of local communities and staff of the biosphere reserve • Decrease by 15% in resource management conflicts by Year 3 as compared to Year 1 of the project 	<p>Baseline established at year 1</p> <p>Baseline established at year 1</p> <p>Baseline established at year 1</p>	<p>Surveys from Component 2</p> <p>Surveys from component 2</p> <p>Surveys and research results from component 2; social and economic surveys, reports from the BR staff</p>
Outcome Three	<ul style="list-style-type: none"> • Application of studies of human /biodiversity interactions and GIS in biosphere reserve planning and management • At least one successful microenterprise functioning in each biosphere reserve at project termination. Success indicators for each will be established at initiation of each microenterprise • 2 local mediators operating per biosphere reserve (12) at year 4 	<p>Baseline year 1</p> <p>Baseline established after training in micro-enterprise provided (Year 1 and 2)</p> <p>Baseline at year 1</p>	<p>Interactions indicators to be built on Year 1, testing the years afterwards. Training in GIS to be provided in Year 1 and year 2</p> <p>Economic surveys, training results</p> <p>List of local mediators established in the six BR</p>

Outcome Three	Key performance indicator	Baseline (if baseline is not known, please identify how and when baseline will be established)	Method of data collection/Data collection strategy (including frequency)
	<ul style="list-style-type: none"> • By year 4, 10% of schools located in the transition areas are participating in school competitions related to the biosphere reserve • By year 4, a 30% increase over year one surveys of the number of people aware of importance of savanna ecosystems in the country and the role of biosphere reserves in conserving them • Increase in the number of TV programmes, articles in newspapers, local and national radio on biosphere reserves compared to year 1 of the project 	<p>Baseline Year 1</p> <p>Baseline Year 1</p> <p>Baseline Year 1</p>	<p>Number of school competitions</p> <p>Surveys on environmental awareness, local meetings</p> <p>Number of TV shows, articles etc...</p>

Table 4: Monitoring, Reporting and Evaluation Responsibilities

This table summarizes the responsibilities of the project management entities regarding monitoring and reporting.

UNEP	Project Management Unit (PMU)	Steering Committee
Monitor the agreed M&E plan in accordance with the terms of agreement with GEFSEC	Establish reporting guidelines for all partners in the project and ensure that they meet reporting dates and provide reports of suitable quality	Receive half-yearly progress reports, annual summary progress reports and all substantive reports and outputs and use them to annually review the progress of work in the project as a whole, and provide policy guidance to the project on any matters arising from a reading of these reports
Receive half-yearly progress and annual summary progress reports, quarterly-financial reports and copies of all substantive reports from Project Management Unit.	Prepare half-yearly progress reports and annual summary progress reports for UNEP, and forward substantive and quarterly financial reports, with supporting documentation as appropriate, in a timely manner to UNEP.	Assist the Project Management Unit in developing linkages with other projects and other partners, thus ensuring the sustainability of the activities and the visibility of the project.
Task manager to attend and participate fully in meetings of the project Steering Committee	Carry out a programme of regular visits to project sites to supervise activities, and pay special attention to those sites with serious implementation problems	Advise on possible new partnerships for co-financement and collaboration on similar thematic issues and activities.
Task Manager to conduct semi-annual supervision missions—and on as needed basis if more frequent visits are required-- with member(s) of the PMU to selected project sites and identify implementation problems and suggest remedies at that time and to the annual meeting of the Steering Committee.		Provide overall guidance for the project implementation.
Engage and prepare terms of reference for independent M&E consultants to conduct the mid-term and final evaluations		Advise Project Management Unit on implementation problems that emerge, and suggest possible modifications to the workplan for the succeeding year accordingly.
Facilitate the selective review of the project by STAP (as appropriate)		Monitor progress in the scientific and capacity-building aspects of the project, and advise the Project Management Unit on steps to enhance this aspect of the project
Carry out other monitoring as is determined in collaboration with the project Steering Committee.		

Notes for Table 4:

The Project Management Unit consists of: UNESCO Headquarters Project Officer and its administrative and secretarial team in collaboration with UNESCO Dakar Regional Office and UNESCO Bamako Regional Office.

The Steering Committee consists of the six managers of the Biosphere Reserves and of international scientific experts on management of natural resources, protected areas and participatory approaches and UNEP GEF Task Manager.

Table 5: Monitoring and progress reports

This table describes the key content required in the bi-annual progress reports and quarterly financial reports.

Report	Format and Content	Timing	Responsibility
<p>Progress Reports Document the completion of planned activities, and describe progress in relation to the annual operating/work plan.</p> <p>Review any implementation problems that impact on performance</p> <p>Summary of problems and proposed action</p> <p>Provide adequate substantive data outcomes for inclusion in consolidated project half-yearly and annual progress reports</p> <p>Highlights of achievements</p> <p>The Project Implementation Review (PIR) reports</p>	<p>Reports will use standard UNEP Progress Report format.</p> <p>The project logframe will be attached to each report and progress reported against outcome and output indicators.</p> <p>Per GEFSEC format</p>	<p>Half-yearly, within 30 days of end of each reporting period,</p> <p>Yearly (after project has been under implementation for one year)</p>	<p>Project Management Unit</p> <p>UNEP Task Manager</p>
<p>Consolidated Annual Summary Progress Reports Presents a consolidated summary review of progress in the project as a whole, in each of its activities and in each output</p> <p>Provides summary review and assessment of progress under each activity set out in the annual workplan, highlighting significant results and progress toward achievement of the overall work programme</p> <p>Provides a general source of information, used in all general project reporting</p>	<p>Reports will use a standard format to be developed following the UNEP Progress Report model</p> <p>The project logframe will be attached to each report and progress reported against outcome and output indicators.</p> <p>A consolidated summary of the half-yearly reports</p> <p>Summary of progress and of all project activities</p> <p>Description of progress under each activity and in each output</p> <p>Review of delays and problems, and of action proposed to deal with these</p> <p>Review of plans for the following period, with report on progress under each heading</p>	<p>Yearly, within 45 days of end of the reporting period</p>	<p>Project Management Unit</p>

Financial reports			
Report on cofinancing that has been provided to project as originally estimated in project proposal approved by GEF		Annual	Project Management Unit
Financial reports			
Details project expenses and disbursements	Standardized UNEP format as found in project document Disbursements and expenses in categories and format as set out in standard UNEP format, together with supporting documents as necessary	Quarterly	Project Management Unit
Financial audits			
Annual audit	Audit of accounts for project management and expenditures	Annual	Project Management Unit

Table 6. Principal Reports by title, number, timing and responsibility

This table refers to monitoring the quality of the technical reports that the project will be producing as primary outputs. The project management unit will provide a standardized format for these reports as soon as possible after the first steering committee meeting.

Report, number and title	Format and Content	Expected date	Responsibility
Scientific and technical Report of UNESCO -Paris regional Meeting, December 2003	Content will follow guidelines provided by Project Management Unit and approved by Project Steering Committee.	December 2003	Project Management Unit in collaboration with coordinators of each component. Reports to be approved by project SC.
Report on Second regional training workshop. 2004	ibid	July 2004	As above
Report on Third regional training workshop. 2005	ibid	November 2005	As above
Scientific and technical report of UNESCO -Dakar regional Meeting. 2006.	ibid	December 2006	As above
Steering Committee Report N. 1. December 2003	ibid	December 2003	As above
Steering Committee Report N. 2. 2004.	ibid	December 2004	As above
Steering Committee Report N. 3. 2005.	Ibid	December 2005	As above
Steering Committee Report N. 4. 2006.	ibid	December 2006	As above
Technical case studies on the six biosphere reserves	ibid	December 2005, 2006, 2007	As above

**ANNEX 9: ANNEXES FROM THE GEF PROJECT PROPOSAL
APPROVED BY GEF COUNCIL**

- ANNEX 9A. INCREMENTAL COSTS
- ANNEX 9B. PROJECT LOGICAL FRAMEWORK MATRIX
- ANNEX 9C. STAP TECHNICAL REVIEW AND RESPONSE TO STAP REVIEW
- ANNEX 9D. LETTERS OF ENDORSEMENT (AS SEPARATE ATTACHMENT)
- ANNEX 9E. PUBLIC INVOLVEMENT AND PROJECT COORDINATION PLAN SUMMARY
- ANNEX 9F. LOCATION MAP OF DRYLAND BIOSPHERE RESERVES
- ANNEX 9G. LIST OF MAB NATIONAL COMMITTEE CONTACTS
- ANNEX 9H. BIOSPHERE RESERVE SCHEMATIC ZONATION
- ANNEX 9I. IMPLEMENTATION INDICATORS OF SEVILLE STRATEGY FOR BIOSPHERE RESERVES
- ANNEX 9J. RELATIONSHIP OF REGIONAL PROJECT TO ONGOING PROJECTS AT THE BIOSPHERE RESERVES DEMONSTRATING ADDED VALUE OF REGIONAL PROJECT AND LINKAGE TO COUNTRY NATIONAL BIODIVERSITY STRATEGIES AND ACTION PLANS
- ANNEX 9K. SUMMARY STRATEGY FOR CAPACITY BUILDING AT THE BIOSPHERE RESERVES AND NATIONAL AND REGIONAL LEVELS
- ANNEX 9L. SCHEMATIC SUMMARY OF CONSULTATIVE PROJECT DESIGN PROCESS
- ANNEX 9M. SUPPORTING DOCUMENTS AVAILABLE IN FRENCH

Annex 9A. Incremental Costs

BROAD DEVELOPMENT GOALS

The CBD and the CCD recognise and prioritise the in-situ conservation of biodiversity. In many parts of the world, savanna ecosystems have been converted or transformed into agricultural systems of various kind or have been replaced by expanding urban areas and other types of development. One consequence of this landscape transformation is that many types of savanna ecosystems are now confined to protected areas.

The six countries have identified biosphere reserves as effective tools for the in-situ conservation of savanna ecosystems as reflected in their respective National Biodiversity Strategies and Action Plans. The global significance of the biodiversity that each biosphere reserve contains has been a primary stimulus for the identification and designation of the six biosphere reserves involved in the project, all of which are now inscribed in the World Network of Biosphere Reserves. Each biosphere reserve is intended to fulfil three basic functions, which are complementary and mutually reinforcing: a) conservation function - to contribute to the conservation of landscapes, ecosystems, species and genetic variation; b) development function to foster economic and human development which is socio-culturally and ecologically sustainable; and c) a logistic function - to provide support for research, monitoring, education and information exchange related to local, national and global issues of conservation and development.

Within each country, policies are established to improve legal and institutional frameworks for conservation, increase environmental awareness and education, and strengthen management of protected areas and natural reserves, including biosphere reserves ¹⁰.

BASELINE

INFORMATION FOR CONSERVATION MANAGEMENT

The partner countries recognised the need to implement field-based activities to better inform biodiversity conservation and sustainable use strategies in each biosphere reserve. This has been recognised as a priority in the NBSAPs of the six countries but has been weakly implemented for lack of resources. International programmes/projects are conducting activities that have the potential to provide support for country actions such as in the case with the European Commission ECOPAS Programme for the W region (Bénin, Burkina Faso and Niger). The limited activities and programmes in the biosphere reserve sites that are geared towards generating management information focus almost exclusively on natural sciences.

The resources allocated to ongoing management information activities are approximately US\$ 1,410,000.

CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY

Each biosphere reserve participating in the project has a management plan that specifies the main activities to be undertaken in order to conserve and sustainably use biodiversity. Countries do not have the financial means to fulfil all the objectives assigned in an effective management plan, nor do they have the financial and human resource capacities to efficiently attain the first objective of a biosphere reserve, i.e., conservation. Therefore, the countries are

¹⁰ As detailed in the table in Annex J.

concentrating their financial and human resources on classical baseline conservation activities, such as park/core area surveillance and monitoring of fauna and flora.

Other national, regional and international partners are supporting the countries in the implementation of their biodiversity strategies, especially in protected areas. Countries like Bénin have been successful in obtaining substantial financial support for their biosphere reserves and other protected areas, through various funding sources, such as the GEF, the German Cooperation (GTZ), and the French Government.

Overall, the current baseline costs for the conservation and sustainable use of biodiversity by international partners, has been estimated at \$10,215,000, with Bénin receiving up to \$7 million, and Burkina Faso, Niger and Sénégal benefiting from substantial support for the next five years.

MANAGEMENT CAPACITY AT INDIVIDUAL AND INSTITUTIONAL LEVELS

All countries have limited financial resources to implement capacity building activities (e.g., training in natural resource management, conflict resolution, environmental awareness, public education etc.) for target groups such as biosphere reserve staff, local communities, students from all educational levels, general public etc. When resources *are* available, the needs of the park and biosphere reserve staff are the top priority and training focuses on conservation aspects in the core areas.

International partners are supporting Bénin, Niger and Sénégal to develop basic infrastructure such as libraries and small research centres. Limited public awareness activities are being conducted by NGOs with local populations and with the general media.

The total baseline projection for this component is \$US 2,100,000.

All the countries are participating in the AfriMAB network and therefore are dedicating some very limited resources to regional information exchange. The total baseline projection for this regional component is \$US 238,000.

GLOBAL ENVIRONMENTAL OBJECTIVES

The global community benefits greatly from the indirect use values (e.g., ecosystem services) that the savanna ecosystems of the six biosphere reserves provide which cover an area of 5,970,000 hectares. Ecosystem conservation at the six biosphere reserves will help maintain future indirect use values for the global community. Successful implementation of the biosphere reserve concept and processes (conservation function - to contribute to the conservation of landscapes, ecosystems, species and genetic variation; development function to foster economic and human development which is socio-culturally and ecologically sustainable; and logistic function - to provide support for research, monitoring, education and information exchange related to local, national and global issues of conservation and development) will increase and extend the maintenance of indirect use values.

In addition to the indirect use values, the global community benefits from the existence of the unique dryland biodiversity that is found in the savanna ecosystems that dominate the biosphere reserves. Savannas are dynamic ecosystems, determined by plant-available moisture, plant-available nutrients, fire and herbivory, at different spatial and temporal scales. They have a long history of human use.

West African savannas contain woodland areas with an understory of tall grasses, as well as shrubs and herbs. West Africa savanna is not particularly renowned for endemic or local richness of its fauna, especially in comparison with savannas in East and Southern Africa. It is better known for its endemic plants. Since the climate is tropical, but strongly seasonal, a significant migration of large vertebrates and birds occurs. A number of mammal species are threatened with extinction, and most of remaining populations and savanna habitats are found in the protected areas and in the six biosphere reserves of the project. These habitats are mainly threatened by unsustainable socio-economic activities, and pressures on access to land and resources.

Ungulates such as elephants and giraffes, which are only found now in W Niger transition area and thus represent a key component of this global benefit for the West African region. However, populations of all these mammals have become much smaller as their habitats have either disappeared or become fragmented, and in some countries they are locally extinct.

Without additional resources to improve management in the biosphere reserves, global benefits derived from the biodiversity found therein will be steadily eroded. This erosion will diminish indirect use values (ecosystem services, etc.), future option values, and existence values provided to the global community. Support from the GEF will assist six West African countries to implement effective biosphere reserve management that balances conservation and development imperatives for the benefit of local and global communities.

ALTERNATIVE

INFORMATION FOR CONSERVATION MANAGEMENT

The activities planned by the partners will support the development of common procedures and protocols for developing human pressure biodiversity impact indicators. In addition, outputs from activities geared towards generating conservation management information will inform the identification of land use practices that conserve and sustainably use biodiversity. Staff and relevant stakeholders at each biosphere reserve will determine sustainable management practices and land uses by studying the impact that resource users are having on the environment and applying this information for management purposes. In particular, viable resource use practices will be tested and piloted in Component Two.

The incremental costs of this component area estimated at \$1,155,000 of which national agencies in countries will provide co-funding of \$633,000. GEF support is requested for an amount of \$522,000.

CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY

The project will test the indicators elaborated in Component One and will establish biodiversity monitoring systems both in core, buffer and transition areas for studying the impacts of resource use on biodiversity. These monitoring systems will help evaluate impact of the pilot conservation and sustainable use activities to be undertaken in Component Two. The conservation status of the core area of the biosphere reserve should be improved through the identification, piloting and initial validation of sustainable use practices of local communities in buffer and transition zones. Support from the local communities for the conservation of the biosphere reserve will also be improved.

The incremental cost of this component is estimated at \$1,260,000. GEF support is requested for an amount of \$421,000. Co-financing from international and national partners is estimated at \$839,000.

MANAGEMENT CAPACITY AT INDIVIDUAL AND INSTITUTIONAL LEVELS

Local and national training for local communities, students from all educational levels, the general public, and biosphere reserve staff have been identified as a priority and this will be undertaken in a number of key areas such as use of informatics, the use of GIS etc. Materials will be produced to raise environmental awareness in the biosphere reserve and at national level.

The incremental costs for this component is \$US 1,325,000. GEF is requested to support this component with \$576,000. Co-financing is expected to provide \$749,000.

Regional training will be held in issues such as conflict management and resolution and the socio-economic dimensions of biodiversity conservation and sustainable use. Regional workshops will be held on common thematic aspects in order to exchange information and experience. Results of the project will be disseminated via the AfriMAB network and through the internet and other existing communication mechanisms such as the AfriMAB regional bulletin.

The incremental costs for this regional component is \$2,358,000 of which \$881,000 is requested from GEF. Co-financing is expected to provide \$1,477,000.

SYSTEMS BOUNDARY

The system boundary of the project in the geographic sense includes the entirety of the six biosphere reserves including of course the ecosystems and the set of species that occur within them. The key thematic domain within the project is the existing knowledge base on the conservation and sustainable use of biodiversity within savanna ecosystems. A secondary domain includes the existing institutional, social and management frameworks within each biosphere reserve related to management of the biosphere reserve and implementation of scientific research and conservation activities with local communities.

The scope of analysis for the project included operational activities within each biosphere reserve related to the generation of information and knowledge to support informed conservation management, conservation and sustainable use of biodiversity, and capacity building and training.

COSTS

Baseline expenditures amount to \$13,963,000. The alternative has been costed at \$20,061,000.

The incremental cost of the project \$6,098,000 is required to achieve the project's global environmental objectives. Of this amount, \$2,400,000 is requested for GEF support, corresponding to 39% of the total cost of implementing the alternative. The remaining 61% of the cost of the alternative will come from national and international partners and other donors and includes in kind contributions.

Incremental Cost Matrix

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
Domestic benefits	<ul style="list-style-type: none"> • Absence of a systematic approach to building knowledge, expertise and institutional skills • Biosphere reserves functioning but at a very low level • Limited participation by local people and communities in biosphere reserve management • Shortage of local personnel adequately trained in the conservation and management of natural resources • Limited opportunities for alternative income activities • Direct use values of hunting, fishing, plant collecting, etc exist but under threat without effective management • Ecosystem services and functions provided by biosphere reserves threatened by unsustainable resource use 	<ul style="list-style-type: none"> • Information/knowledge generated including local knowledge integrated into resource management decisions • Integrated management of the biosphere reserve • Biosphere reserves function per design • Biosphere reserve management effectively includes local communities and resource users in management activities • Decrease in conflicts over resource use between local communities and biosphere reserve staff • Adoption of sustainable use activities by local communities • Ecosystem services, functions and direct use values maintained through effective biosphere reserve management 	<ul style="list-style-type: none"> • Improved management of biosphere reserves • Enhanced use of scientifically-based information for resource management decisions • Socio-economic needs of local communities addressed in a more systematic way • Steady state or increased flow of long-term benefits from ecosystem services and resource use • Direct use values and resource use managed under sustainable management approaches
Global benefits	<ul style="list-style-type: none"> • AfriMAB network provides platform for exchange of experiences and lessons learned amongst countries • Lack of knowledge and limited awareness amongst the region of importance of savanna ecosystems • Globally significant biodiversity in the biosphere reserves are under threat from unsustainable resource use • Inadequate participation of local communities, limited scientific and technical capacity for management of biosphere reserves, insufficient knowledge base for applying sustainable resource management activities with local stakeholders, weak institutional co-ordination 	<ul style="list-style-type: none"> • Strengthened and more effective AfriMAB network improves cooperation in the management of West African savannas and raises awareness of the importance of savanna ecosystems • Conservation and sustainable use of globally significant savanna ecosystems improved within the biosphere reserves • Scientific and technical knowledge and capacity to conserve and sustainably use biodiversity strengthened • Local knowledge on conservation and sustainable use of biodiversity maintained and applied 	<ul style="list-style-type: none"> • Increased area of globally significant savanna ecosystems under improved management • Threats to globally significant biodiversity reduced • Globally significant biodiversity sustainably used • Maintenance of global conservation and indirect use values • Enhanced long-term conservation prospects through integration of development and conservation objectives within each reserve

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
Component One. Generation of Information to Improve Conservation and Sustainable Use of Biodiversity	<ul style="list-style-type: none"> Limited data and information required for management and conservation needs Limited information to identify and apply sustainable use activities Lack of substantiation of local knowledge in conservation plan and strategies Lack of standard or inter-calibrated methods and research protocols to identify, measure and monitor biodiversity and the goods and services provided by the biosphere reserve 	<ul style="list-style-type: none"> Enhanced understanding of interactions between local communities and savanna ecosystems Common research and monitoring protocols adopted within the biosphere reserves and the AfriMAB network and long-term research indicators established on the impacts of land use on biodiversity. Database for scientific and management purposes created. Monitoring and evaluation mechanisms for adaptation of research objectives to socio-economic needs 	
	Baseline for output 1 : Bénin : 165,000 Burkina Faso : 370,000 Côte d'Ivoire : 245,000 Mali : 130,000 Niger : 310,000 Sénégal : 150,000 UNESCO : 40,000 Total : 1,410,000	Alternative for output 1: Bénin : 450,000 Burkina Faso : 620,000 Côte d'Ivoire : 375,000 Mali : 260,000 Niger : 450,000 Sénégal : 280,000 UNESCO : 130,000 Total : 2,565,000	Bénin : 285,000 Burkina Faso : 250,000 Côte d'Ivoire : 130,000 Mali : 130,000 Niger : 140,000 Sénégal : 130,000 UNESCO : 90,000 Increment total: 1,155,000 Co-finance: 633,000 Cost to GEF: 522,000
Component Two. Conservation and Sustainable Use of Biodiversity	<ul style="list-style-type: none"> Inadequate conservation of the core area of the biosphere reserve Limited economic alternatives for increasing livelihoods of local communities 	<ul style="list-style-type: none"> Conservation status of biodiversity in the core area improved Demonstration of sustainable use activities tested in sites located in buffer and transition zones and adopted by local communities 	
	Bénin : 7,260,000 Burkina Faso : 550,000 Côte d'Ivoire : 425,000 Mali : 400,000 Niger : 820,000 Sénégal : 720,000 UNESCO : 40,000 Total : 10,215,000	Bénin : 7,500,000 Burkina Faso : 800,000 Côte d'Ivoire : 545,000 Mali : 670,000 Niger : 970,000 Sénégal : 830,000 UNESCO : 160,000 Total : 11,475,000	Bénin : 240,000 Burkina Faso : 250,000 Côte d'Ivoire : 120,000 Mali : 270,000 Niger : 150,000 Sénégal : 110,000 UNESCO : 120,000 Incremental Total: 1,260,000 Co-finance: 839,000 Cost to GEF: 421,000

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
<p>Component Three (National level)</p> <p>Strengthening Capacity and Institutional Co- ordination to Effectively Manage Biosphere Reserves</p>	<ul style="list-style-type: none"> • Inadequate collaboration between stakeholders involved in biosphere reserve management and conservation. • Limited staff capacity in natural resource use and conservation activities, information management, and conflict resolution • Lack of knowledge and awareness amongst local communities about the biosphere reserve, its management objectives and how they can benefit. 	<ul style="list-style-type: none"> • Collaboration agreements exist between relevant stakeholders and institutions that allow coordinated action. • Mechanisms are identified and supported for integration of local communities into decision making • Managerial skills and technical capacities of biosphere reserve managers and their staff, local communities, government agencies institutions involved in biosphere reserve management enhanced. • Working mediation mechanisms functioning in all six biosphere reserves for conflict-management and resolution amongst biosphere reserve managers, local communities, scientists, and national and local government agencies. 	
	<p>Baseline for output 3 :</p> <p>Bénin : 590,000 Burkina Faso : 355,000 Côte d'Ivoire : 180,000 Mali : 150,000 Niger : 375,000 Sénégal : 420,000 UNESCO : 30,000</p> <p>Total : 2,100,000</p>	<p>Alternative for output 3 :</p> <p>Bénin : 890,000 Burkina Faso : 605,000 Côte d'Ivoire : 330,000 Mali : 335,000 Niger : 515,000 Sénégal : 550,000 UNESCO : 200,000</p> <p>Total : 3,425,000</p>	<p>Bénin : 300,000 Burkina Faso : 250,000 Côte d'Ivoire : 150,000 Mali : 185,000 Niger : 140,000 Sénégal : 130,000 UNESCO : 170,000</p> <p>Increment total: 1,325,000</p> <p>Co-finance: 749,000</p> <p>Cost to GEF: 576,000</p>

Cost/Benefit Component Three (regional level)	Baseline (B) <ul style="list-style-type: none"> Willingness to cooperate at regional level but lack of financial resources and institutional incentives 	Alternative (A) <ul style="list-style-type: none"> Increased scientific and technical information flow on biosphere reserve management and conservation in each biosphere reserve and within the region through regional workshops, electronic conferences and regional publications 	Increment (A-B)
Strengthening Capacity and Institutional Co-ordination to Effectively Manage Biosphere Reserves	Baseline for Output 4 : Bénin : 25,000 Burkina Faso : 20,000 Côte d'Ivoire : 25,000 Mali : 40,000 Niger : 55,000 Sénégal : 40,000 UNESCO : 33,000 Total : 238,000	Alternative for Output 4 : Bénin : 305,000 Burkina Faso : 270,000 Côte d'Ivoire : 285,000 Mali : 200,000 Niger : 220,000 Sénégal : 200,000 UNESCO : 1,116,000 Total : 2,596,000	Bénin :280,000 Burkina Faso : 250,000 Côte d'Ivoire : 260,000 Mali : 160,000 Niger : 165,000 Sénégal : 160,000 UNESCO : 1,083,000 Increment total: 2,358,000 Co-finance: 1,477,000 Cost to GEF: 881,000

ANNEX 9 B.
PROJECT LOGICAL FRAMEWORK MATRIX

Narrative Summary (Intervention Logic)	Objectively Verifiable Indicators	Means of Verification	Important Assumptions & Risks
Development Goal			
Conservation and sustainable use of globally significant biodiversity in six biosphere reserves.	<p>Status of indicator species for each individual biosphere reserve remains steady. (Elephants (Boucle du Baoule, Pendjari and Niokolo Koba Biosphere Reserves, Giraffes (“W” Biosphere Reserve, Hippotamus (Mare aux Hippopotamus), Savanna buffalo (Comoe Biosphere Reserve) Hippotragues (<i>Hippotragus equinus</i>) in Pendjari and Comoé Biosphere Reserve.</p> <p>Basal coverage of vegetation and diversity of vascular plants remains steady.</p> <p>Monitoring will be done at year 2 and year 4, compared to baseline information collected in year 1.</p>	<p>Remote sensing data and land cover analysis (tree cover evolution)</p> <p>Field Reports (species and habitat surveys)</p>	<p>Political and economic stability in the six countries</p> <p>Other factors outside the systems boundary of the project do not negate positive impact of this targeted intervention.</p>

Narrative Summary (Intervention Logic)	Objectively Verifiable Indicators	Means of Verification	Important Assumptions & Risks
Project Purpose/Immediate Objective			
Strengthened scientific and technical capacity for effective management of the biosphere reserves.	<p>Implementation indicators of the Seville Strategy (See Annex I for implementation indicators to be used at national reserve level.)</p> <p>Improvement in management effectiveness of core area using the IUCN/WB protected area management scorecard. Baseline established at project initiation</p> <p>Biosphere reserves used as demonstration sites for scientific purposes and environmental awareness programme</p>	<p>Reports on Implementation Indicators of the Seville Strategy</p> <p>Annual reports from IUCN/WB protected area management scorecard</p> <p>Remote sensing data and field reports (species/habitats surveys)</p> <p>Transects in the core zones</p> <p>Field surveys and reports from the rangers of the core areas</p> <p>Biosphere reserve annual reports</p>	<p>Political and economic stability in the six countries.</p> <p>Staff are not rotated to other sites or offices on a regular basis</p> <p>Trained staff are not immediately promoted to new positions which are of little relevance to project purpose</p> <p>National and local Government support is provided on a consistent basis.</p> <p>Qualified staff available to conduct monitoring.</p>

Narrative Summary (Intervention Logic)	Objectively Verifiable Indicators	Means of Verification	Important Assumptions & Risks
Outcome One. Improved understanding of the impact of human activities on savanna ecosystems	Population dynamics of key species and condition of key habitats understood by the end of year 3	Research reports	Scientific teams are constituted and willing and able to work together
	Sustainable use activities identified for application in the design of resource-use demonstrations in Component Two.	Field surveys on interactions with human communities in demonstration sites	Participation of local communities Sustainable and economically viable alternative livelihood options exist Trained staff, expert collaborators available to conduct field studies
	Human pressure indicators developed and applied by year one. These will include impacts of agriculture, pastoralism, fishing, plant collecting, firewood collecting, and hunting on biodiversity.	Research reports	Participation of identified villages in the research activities Applicable indicators can be developed
	Twenty % increase in the number of users of the database for scientific and management purposes (Database usage baseline established at year 3).	Database log recording usage	Suitable qualified personnel available to develop, test and use the system
Outcome Two: Enhanced conservation and sustainable use of biodiversity	Increase in income due to sustainable resource use strategies adopted by test villages at demonstration sites. Baseline established at year one and the target for percentage increase of income will be defined for each project site at end of year one. (Fish farming in the regions of Tiawassage and Porga in Pendjari Biosphere Reserve, collection of medicinal plants in two villages in Mare aux Hippopotames Biosphere Reserve, development of ecovillages in Comoé Biosphere Reserve, commercialization of non wood forest products in Darouma region of Boucle du Baoulé Biosphere Reserve, Craft industry in two villages of the “W” Biosphere Reserve in Niger and in transition zone Niokolo Koba Reserve).	Field reports, records and surveys conducted by biosphere reserve staff Socio-economic surveys Field surveys and reports from the rangers of the core areas	Participation of local communities Understanding of the zonation of the biosphere reserve and respect and recognition of the biosphere reserve management framework Political and economic stability permit Government agency responsibilities to be met Communities have an interest to pursue alternatives and local political support exists to pursue alternatives

	<p>Adoption of sustainable resource-use strategies by 3 villages outside of target demonstrations sites in each biosphere reserve by year 3 of the project.</p> <p>Reduction of incursions in the core area of each biosphere reserve (Baseline established at year 1, 10-15% decrease in incursion in the core areas at end of year 4).</p>		
Narrative Summary (Intervention Logic)	Objectively Verifiable Indicators	Means of Verification	Important Assumptions & Risks
Outcome Three: Strengthened managerial and technical capacities of biosphere reserve managers and their staff, local communities, and government agencies institutions			
<u>Coordination</u>	<ul style="list-style-type: none"> • Number of signed Memorandum of Understanding between national scientific institutions and the biosphere reserve management institution • Establishment of formal links between national universities and research institutions • Increase in the number of agreements signed between representatives of local communities and biosphere reserve staff defining rights and duties of local communities and staff of the biosphere reserve • Creation of a mechanism for conflict resolution in each biosphere reserve (such as a mediation committee) • Established meeting schedule to discuss resource management conflicts • Number of meetings held per year by committee. Steady number based on regular meeting scheduled agreed during year one. • Decrease by 15% in resource management conflicts by Year 3 as compared to Year 1 of the project 	<ul style="list-style-type: none"> • Survey and records from the biosphere reserve staff and participatory interviews in the villages • Meeting minutes 	<p>Intersectoral cooperation is supported</p> <p>National and local government agencies, NGOs, local communities and national universities and research institutions cooperate effectively</p> <p>Institutional stability of all organisations involved</p>

	<ul style="list-style-type: none"> • Surveys for the establishment of Trust Fund in each Biosphere Reserve and/or other conservation financing strategies 	Surveys and strategies produced	<p>Pendjari Biosphere Reserve Trust Fund is operational and can be replicated to the other Biosphere Reserves</p> <p>Political, economic and financial interest exist in the six countries</p>
Narrative Summary (Intervention Logic)	Objectively Verifiable Indicators	Means of Verification	Important Assumptions & Risks
Outcome Three (continued): Strengthened managerial and technical capacities of biosphere reserve managers and their staff, local communities, and government agencies institutions			
<u>Scientific and Technical Capacity</u>	<ul style="list-style-type: none"> • Biodiversity monitoring programme operational by middle of year 2 • Application of studies of human /biodiversity interactions and GIS in biosphere reserve planning and management • Increase in number of publications produced by scientists for applied purposes including interdisciplinary work on biodiversity (baseline established at project initiation) • At least one successful microenterprise functioning in each biosphere reserve at project termination. Success indicators for each will be established at initiation of each microenterprise • Number of users of internet in each biosphere reserve including % of users who reside in local communities • 12 national Phd students graduated at year 4 • 24 master degrees students graduated at year 4 • 2 local mediators operating per biosphere reserve (12) at year 4 • 150 persons directly trained through national and regional training seminars at year 4 	<ul style="list-style-type: none"> • Biodiversity monitoring results • Scientific articles (6), book (1), methodological guidelines and case studies on biodiversity (7) • Regional internet website • Reserve management plans updated with use of new technology • PhD and Masters thesis that produce relevant information for conservation management in the reserves • Official list of mediators for each biosphere reserve 	<p>Staff are not rotated to other sites or offices on a regular basis</p> <p>Trained staff are not immediately promoted to new positions which are of little relevance to project purpose</p> <p>Staff are interested in receiving and utilising training</p>

Narrative Summary (Intervention Logic)	Objectively Verifiable Indicators	Means of Verification	Important Assumptions & Risks
Outcome Three (continued): Strengthened managerial and technical capacities of biosphere reserve managers and their staff, local communities, and government agencies institutions			
<u>Awareness raising</u>	<ul style="list-style-type: none"> • Fifteen percent increase in number of users of biosphere reserve web page and MAB National Committees web sites at year 2, 3 and 4 • By year 4, 10% of schools located in the transition areas are participating in school competitions related to the biosphere reserve • By year 4, a 30% increase over year one surveys of the number of people aware of importance of savanna ecosystems in the country and the role of biosphere reserves in conserving them • Increase in the number of TV programmes, articles in newspapers, local and national radio on biosphere reserves compared to year 1 of the project • Biosphere reserve role in biodiversity conservation is mentioned in national and regional reports, workshop and international monitoring networks 	<p>Reports of biosphere reserve staff</p> <p>Website log and record of user searches</p> <p>Specific field surveys</p>	<p>Participation and collaboration of media; public information reaches appropriate stakeholders</p> <p>Local schools and communities support awareness raising activities</p> <p>Trained staff available to conduct awareness raising activities</p>

Narrative Summary (Intervention Logic)
Activities
Component 1. Generation of Management Information to Improve Conservation and Sustainable Use of Biodiversity
1.1 Analysing dynamics of land occupation and its impact on ecosystems
1.1.1 Study the evolution of demographic pressure in each biosphere reserve
1.1.2 Study spatial dynamic of agriculture and biodiversity
1.1.3 Study the impact of land occupation of biodiversity
1.2 Analysis the impact of fishing, hunting, collecting, pastoralism and wood collecting on the ecosystems
1.2.1 Fish and Biodiversity: organisation of fish activities and building of indicators
1.2.2 Pastoralism and Biodiversity: building of indicators
1.2.3 Collecting and Biodiversity: building of indicators
1.2.4 Fire wood collecting and biodiversity: building of indicators
1.2.5 Local hunting and biodiversity: building of indicators
1.2.6 Poaching and biodiversity: building of indicators
1.3 Conduct analyses on local communities and the ecosystems
1.3.1 Study the local economies and institutions in the demonstration sites
1.3.2 Study the local representations of nature
1.3.3 Study local knowledge of flora and fauna and biotopes
1.3.4 study main constraints on local communities (insecurities)
1.4 Publication of results
1.4.1 Prepare and publish scientific results of project
1.4.2 Produce guidelines manual for managers
1.5 Consolidation of research surveys
1.5.1 Develop a scientific database
1.5.2 Update and facilitate its permanent use
Component 2. Conservation and Sustainable Use of Biodiversity
2.1 Testing the sustainability of the ecosystems in the six biosphere reserves
2.1.1 Categorising of human uses impacts

2.1.2 Test the ecological, agricultural, economical and social adaptability of the six biosphere reserves (using indicators and the demonstration activities defined in component one: Fish farming in the regions of Tiawassage and Porga in Pendjari Biosphere Reserve, collection of medicinal plants in two villages in Mare aux Hippopotames Biosphere Reserve, development of ecovillages in Comoé Biosphere Reserve, commercialization of non wood forest products in Darouma region of Boucle du Baoulé Biosphere Reserve, Craft industry in two villages of the “W” Biosphere Reserve in Niger and in transition zone Niokolo Koba Reserve)
2.1.3 Analyse and model ecosystems dynamics (SIG and Agent-based modelling)
2.2 Testing the sustainability of local communities
2.2.1 Test the dependency of local communities vis à vis the biosphere reserve
2.2.2 Test the sustainability of local co-ordination structures for land and resources management
2.2.3 Test the local conflicts management structures
2.3 Implement the biosphere reserve concept: sustainability of local communities and ecosystems
2.3.1 Analyse the relationships between managers and local communities
2.3.2 Analyse the source of incomes (real or potential) from the biosphere reserve for the local communities
2.3.3 Analyse the implication of local communities into the management of the biosphere reserve
2.4 Establish long term mechanism for integration of research and monitoring process into the management plan
2.4.1 Identify national research and education institutions interested in collaborating
2.4.2 Study the co-operative long term modalities
2.4.3 Support the establishment of the formal co-operative links and promote the Co-operation at the national level
Component 3. Strengthening Capacity and Institutional Co-ordination to Effectively Manage Biosphere Reserves
National Level
3.1 Provide training for local populations in:
a) accessing microcredits, creating and managing microenterprises, e.g., ecotourism (village ecoguards) etc as per opportunities in each reserve
b) informatics
3.2 Provide training for site managers in the use of GIS, database management and application in resource use planning
3.3 Provide field training for national and local university students (2 PhD s per site) and masters students in the biosphere reserve to implement the priority information management needs/programme defined in Component One
3.4 Provide basic equipment and access to email and internet in each site and for each MAB National Committee
Component 3 (continued). Strengthening Capacity and Institutional Co-ordination to Effectively Manage Biosphere Reserves
3.6 Establish mechanisms for improving coordination structure for the biosphere reserve
3.6.1 Support the institutional efforts in each site for improving the co-ordination of activities in the biosphere reserve
3.6.2 Facilitate the integration of community participation in these co-ordination structures

3.7. Provide support for the organisation of local and national meetings for exchange of information and provide support for local communication exchange (such as radio programmes, local newspapers, TV programmes)
Component 3. Strengthening Capacity and Institutional Co-ordination to Effectively Manage Biosphere Reserves
Regional Level
4. Implement region-wide training programmes in:
<ul style="list-style-type: none"> a) Environmental education and awareness raising b) Training in conflict management and mediation c) Training in multidisciplinary work for research and for diagnosis d) Training in socio-economic dimension of biodiversity e) Training in informatics
5. Organise Cross site visits between the sites (for managers, local populations and scientists) in order to exchange experience and information
6. Conduct regional thematic workshops (monitoring and socio-economic indicators; quality economies) with one representative of local communities, managers of the biosphere reserves, MAB National Focal points and a Scientific resource person from each biosphere reserve and experts.
7. Establish dissemination strategy within AfriMAB Network
7.1 Establish necessary infrastructure, personnel and equipment (provide network connection between the six sites)
7.2 Develop agreed procedures and mechanisms for information exchange
7.3 Produce joint publication on the results and success stories in the demonstration sites (electronic bulletin, paper bulletin, wallcharts, pedagogical kit)
7.4 Seek support for TV and radio programmes on biosphere reserves

WORK PLAN AND TIME TABLE

Activities	Year 1	Year 2	Year 3	Year 4
Component 1. Generation of Management Information to Improve Conservation and Sustainable Use of Biodiversity				
1.1 Analysing dynamics of land occupation and its impact on ecosystems				
1.1.1 Study the evolution of demographic pressure in each biosphere reserve				
1.1.2 Study spatial dynamic of agriculture and biodiversity				
1.1.3 Study the impact of land occupation of biodiversity				
1.2 Analysis the impact of fishing, hunting, collecting, pastoralism and wood collecting on the ecosystems				
1.2.1 Fish and Biodiversity: organisation of fish activities and building of indicators				
1.2.2 Pastoralism and Biodiversity: building of indicators				
1.2.3 Collecting and Biodiversity: building of indicators				
1.2.4 Fire wood collecting and biodiversity: building of indicators				
1.2.5 Local hunting and biodiversity: building of indicators				
1.2.6 Poaching and biodiversity: building of indicators				
1.3 Conduct analyses on local communities and the ecosystems				
1.3.1 Study the local economies and institutions in the demonstration sites				
1.3.2 Study the local representations of nature				
1.3.3 Study local knowledge of flora and fauna and biotopes				
1.3.4 study main constraints on local communities (insecurities)				
1.4 Publication of results				
1.4.1 Prepare and publish scientific results of project				
1.4.2 Produce guidelines manual for managers				
1.5 Consolidation of research surveys				
1.5.1 Develop a scientific database				
1.5.2 Update and facilitate its permanent use				

Component 2. Conservation and Sustainable Use of Biodiversity						
2.1 Testing the sustainability of the ecosystems in the six biosphere reserves						
2.1.1 Categorising of human uses impacts						
2.1.2 Test the ecological, agricultural, economical and social adaptability of the six biosphere reserves (using indicators)						
2.1.3 Analyse and model ecosystems dynamics (SIG and Agent-based modelling)						
2.2 Testing the sustainability of local communities						
2.2.1 Test the dependency of local communities vis à vis the biosphere reserve						
2.2.2 Test the sustainability of local co-ordination structures for land and resources management						
2.2.3 Test the local conflicts management structures						
2.3 Implement the biosphere reserve concept: sustainability of local communities and ecosystems						
2.3.1 Analyse the relationships between managers and local communities						
2.3.2 Analyse the source of incomes (real or potential) from the biosphere reserve for the local communities						
2.3.3 Analyse the implication of local communities into the management of the biosphere reserve						
2.4 Establish long term mechanism for integration of research and monitoring process into the management plan						
2.4.1 Identify national research and education institutions interested in long term collaboration						
2.4.2 Study the co-operative long term modalities						
2.4.3 Support the establishment of the formal co-operative links and promote the co-operation at the national level						
Component 3. Strengthening Capacity and Institutional Co-ordination to Effectively Manage Biosphere Reserves						
3.1 Provide training for local populations in:						
a) accessing microcredits, creating and managing microenterprises, e.g., ecotourism (village ecoguards) etc as per opportunities in each reserve						
b) informatics						
3.2 Provide training for site managers in the use of GIS, database management and application in resource use planning						
3.3 Provide field training for national and local university students (2 PhDs per site) and masters students in the biosphere reserve to implement the priority conservation management information/needs programme defined in Component One						
3.4 Provide basic equipment and access to email and internet in each site and for each MAB National Committee						

3.5 Conceive materials for environmental awareness in the biosphere reserve (for local communities, biosphere reserve staff, material to be used in schools environmental education programmes (in the transition areas) and for public visiting the biosphere reserve. Translate environmental awareness materials into main local languages.						
3.6 Establish mechanisms for improving co-ordination structure for the biosphere reserve						
3.6.1 Support the institutional efforts in each site for improving the co-ordination of activities in the biosphere reserve						
3.6.2 Facilitate the integration of community participation in these co-ordination structures						
3.7. Provide support for the organisation of local and national meetings for exchange of information and provide support for local communication exchange (such as radio programmes, local newspapers, TV programmes)						
Regional activities						
4 Implement region-wide training programmes in: a) Environmental education and awareness raising b) Training in conflict management and mediation c) Training in multidisciplinary work for research and for diagnosis d) Training in socio-economics dimension of biodiversity e) Training in informatics						
5 Organise Cross site visits between the sites (for managers, local populations and scientists) in order to exchange experience and information						
6 Organise regional thematic workshops (monitoring and socio-economic indicators; ecotourism; quality economies) with one representative of local communities, managers of the biosphere reserves, MAB National Focal points and a Scientific resource person from each biosphere reserve and experts.						
7 Establish dissemination strategy within AfriMAB Network						
7.1 Establish necessary infrastructure, personnel and equipment (provide network connection between the six sites)						
7.2 Develop agreed procedures and mechanisms for information exchange						
7.3 Produce joint publication on the results and success stories in the demonstration sites (electronic bulletin, paper bulletin, wallcharts, pedagogical kit)						
7.4 Seek support for TV and radio programmes on biosphere reserves						

ANNEX 9 C.
STAP ROSTER EXPERT PROJECT REVIEW

STAP Review of

‘Building Scientific and Technical Capacity for Effective Management and Sustainable use of Dryland Biodiversity in West African Biosphere Reserves’

3 February 2003

Reviewer: RJ Scholes

Project overview

The proposal relates to support for six established West African Biosphere Reserves, in Senegal, Burkino Faso, Benin, Niger, Mali and Cote d’Ivoire, and is for a period of four years.

It aims to:

1. undertake applied research relevant to biodiversity management;
2. develop the capacity conserve and sustainably use the biodiversity in the reserves; and
3. enhance the capacity for management in individuals and institutions involved in the conservation of the reserves.

The combined area of the reserves is nearly 6 million hectares. They all fall within the savanna biome, which in West Africa is relatively high in biological diversity, but under-protected and threatened. The reserves are part of the AfriMAB network.

Biosphere reserve	Country	Area (ha)	Biodiversity features
Pendjari	Benin	623000	Extant large mammals (none unique)
Mare aux Hippopotames	Burkino Faso	186000	100 bird species (many migratory) and ~100 fish species
Comoe	Cote d’Ivoire	1150000	Varied habitats, large mammals (rare in W Africa, but not unique)
Boucle du Baoule	Mali	2500000	Crosses biogeographical zones. Elephants.
W	Niger	728000	80% of Niger’s biodiversity represented. Large mammals, including giraffe
Niokolo Koba	Senegal	913000	Derby eland, chimpanzees other large mammals

The total cost of the project is estimated as \$19.8 million, representing an increment of \$5.9 million over the baseline expenditure of \$13.9 million. An amount of \$ 2.4 million is being requested of the GEF; the remainder of the increment is sought from national government (37%, almost entirely in kind), in-country sources (19%) and international partners (44%).

The project addresses locally and nationally-determined needs that complement existing national and international investments. Together they have a reasonable chance of slowing the loss of biodiversity in a highly threatened area of global biodiversity significance.

Key Issues

Scientific and technical soundness

Savannas occupy at least an eighth of the global land surface, and contain an approximately proportional fraction of the known biodiversity, but have not enjoyed a commensurate focus of attention. In Africa they cover about 14 million km² (closer to 60% of Africa than the 40% quoted in the proposal: see White, F 1983 *Vegetation of Africa*, UNESCO). West African savannas cover about 4.6 million km² (460 million ha).

West African savannas share many ecological attributes with East and southern African savannas, and some high-level taxonomic similarities, but at species level they are fairly distinct. Largely due to the accidents of pre- and post-colonial history, the East and southern African savannas are relatively well conserved, but the West African savannas are poorly protected in a formal sense. The reserves targeted in this proposal represent a very significant part of the 28.7 million ha of protected area (all biomes) in West Africa, and sum to about 1% of the potential savanna biome extent in West Africa. Outside of the formally protected areas, transformation resulting from intensive agricultural use (grazing, cultivation and harvesting) continues at a high rate, and the prospects for biodiversity conservation are not very favourable. The most likely sites for developing biodiversity-favouring land use systems are arguably in the buffer and transitional areas around the reserves, as is suggested in this proposal.

The proposal is vague about the particular aspects and levels of biodiversity it may address. Hanging the proposal on remnant populations of elephants, chimpanzees or giraffe may be good publicity, but is poor science. A much more convincing case could be based on an analysis of plant and bird diversity, which run to thousands of species, many of which are unique to the region. An even better case would incorporate a landscape and habitat (ecosystem) analysis that would, I am sure, demonstrate that these are among the last areas in which viable core populations could be protected, along with their natural interactions.

The argument put forward in the proposal is that sound management of the reserves must be based on reliable information regarding the distribution and status of the biodiversity, on the one hand, and the nature and trend in land use practices in and around them, on the other hand. The second and third components of the argument, that sustainable resource-use practices need to be identified and implemented, and that doing so will require the development of management capacity in individuals and institutions, are also sound. As a stand-alone project, the three interventions are insufficient in scope, intensity and duration to achieve the desired goal ensuring a sustainable future for these reserves. They must be presented in the context of other efforts targeted more directly at conservation management and human development in the biosphere neighbourhood.

The increment requested is relatively small in relation to what is estimated to be the current expenditure on the conservation of these resources. It is qualitatively different, in that it addresses information, coordination, capacity and research issues deemed to be critical, but not catered for in existing expenditure.

The history of encroachment on the core areas and intensification of use in the buffer and transition zones is unlikely to be reversed by research interventions alone; but they could be effective as complementary investments to a substantial programme that delivers the basics of conservation management and livelihood development.

The key issues with respect to sustainability are political commitment at national level, the ability to implement national biodiversity conservation policy on the ground, a genuine perception by local communities that the protection and sustainable use of the resource is in their best interest, the viable livelihoods that permit them to do so.

The proposal identifies three ‘common barriers and constraints limiting effective management’ (by what process, and by whom this identification was performed, is not stated). They are

1. a knowledge gap;
2. weak institutional coordination; and
3. limited capacity of stakeholders.

These form the basis of the three components of the project. Specifically, the knowledge gap relates to both on-the-ground information about the biodiversity resources (indicators), and the way in which local communities use and impact on them. More information is apparently available in the natural than social sciences. The identified areas of focus are the dynamics of human settlement, the local economies and the perceptions of local communities. The work plan tends to reinforce the bias towards natural science, since the social indicators have yet to be developed. A plan for the dissemination of results focuses on public media (radio, theatre, speakers). Is this where the knowledge gap is most acute, and information most effective?

The institutional weakness is said to be poor coordination between research, conservation and natural resource institutions, and the absence of conflict resolution structures. The coordination structures proposed are relatively complex (Annex E) and could consume a significant part of the effort, while changing little on the ground. The neglect of indigenous technical knowledge is raised as an issue here, but a cogent case as to why more emphasis on ITK would solve the problem is not given, leaving the impression that it was simply introduced because it is fashionable (like the word ‘indicators’). The proposed response is to identify and promote viable activities that conserve and use biodiversity sustainably. These will build on existing management plans (no specific examples are given) and on findings of the research carried out above – which is unlikely to be delivered until late in the project.

The main capacity need is identified as the knowledge and skills needed for collaborative management of a biosphere reserve. The interventions are proposed to be training modules, internet connections, laboratories, and the development of a coordination mechanism. These seem to be strategies of hope and habit rather than based on a rigorous analysis of what skills are needed, who should get them and how they should be developed.

Global benefits and risk

The effective protection of biodiversity within the target areas identified by the proposal would constitute both a local and global benefit. The magnitude of this benefit is hard to quantify, but is

significant, given the relative richness of the biome in plant and animal species, and the risk that it faces in terms of historical trends of land transformation and unsustainable use.

Fit to goals of the GEF

The GEF is mandated, among other things, to support the incremental costs of projects aligned with the aims of the Convention on Biological Diversity. This proposal meets that requirement. It is further evidently aligned with National Biodiversity Conservation Strategies.

Regional context

The proposal makes insufficient use of the regional dimensions of the project. The locations are distributed over six countries, and a range of ecological situations. This imposes logistical difficulties and additional costs on the project, which are presumably balanced by some benefit. What is that benefit? Is it ecological (the reserves can exchange species, for instance, or collectively comprise a robust sample of West African savanna diversity) or is it institutional (exchange of learning, skills and experience, the greater political clout of a regional consortium)? Unless these are spelled out, the impression remains that the partners are in a marriage of convenience whose main purpose is its self-perpetuation, and will essentially operate as individual entities, diluting the potential impact.

Replicability

All of the actions proposed here are in principle replicable – they could for instance be replicated from experience with successful projects of this nature in southern Africa. There is some scope for replication in West Africa, but the potential for further projects at this scale is limited, since there remain very few areas of sufficient size and condition to act as cores for biosphere reserves.

Sustainability

The project is structured as a short-term intervention, with little explicit attention to the mechanisms by which it would become sustainable in the longer term. It is quite likely that when the project funding is finished, the level of effort will simply fall back to the baseline, with little long-term benefit, unless another tranche of intervention funding follows, or unless some explicit attention is given to sustainability issues. In my experience it is unlikely that four years of funding will generate an intellectual capacity, or an institutional capacity, that is self-sustaining. Successful projects of that nature typically require much more focus (i.e., fewer locations, selected for their economic viability) and support over a decade or more. It is relatively easy to conduct once-off biodiversity or social surveys, but the long-term maintenance of monitoring programmes, funded by national governments, is much more problematic. It will only succeed if it is driven by genuine demand for the information at a policy-formulating level. How will such a demand be developed? The development of institutional and individual capacity has a very patchy history in Africa – the institutions collapse unless they can establish a support base, and the individuals are ineffective in the absence of a context in which they can work. Can the individuals become sufficiently skilled in the time available that they can in turn become a training resource for future generations?

Reading between the lines, other parallel proposals are intended to provide part of the future need for support. There needs to be more attention in the proposal to the institutional context into which the knowledge and capacity will be fed, since this is what could provide it with the critical mass and longevity to achieve sustainability.

Secondary Issues

Linkage to other focal areas

There is no explicit linkage in the proposal to other GEF focal areas. Potential linkages exist with climate change (African biodiversity is significantly threatened by climate change, particularly in the context of an increasing fragmented landscape and the low capacity of conservation institutions to respond to the problem). A case could be made for linkage of this proposal to the Convention on Combating Desertification, if the actions proposed would halt or reverse degradation (i.e. loss of ecosystem services) in the core, buffer or transitional areas.

In my opinion, neither of these linkages *substitute* for a clear focus on the biological diversity benefits of the project. They are simply additional benefits.

Linkage to other programmes

The proposal is strongly linked to (in fact, apparently emanates from) the AfriMAB network of the Man and the Biosphere programme of UNESCO. It is not clear what other benefits accrue (e.g. methods, skills, political influence) from membership, or what benefits may flow to the global community from this project via the AfriMAB network. A significant portion of both the baseline and incremental funding originates from linkages to other programmes.

At Pendjari reserve there is a linkage to an existing GTZ-funded project with very similar objectives. A 'PDF-B' is under preparation for the GEF relating to community-based conservation in the transition zone of three reserves (Arly, W and Pendjari). At Mare aux Hippopotames there is a GEF/World Bank project, and the reserve is part of the ROSELT network. Comoe has received World Bank support in the period 1996-2003. Boucle de Baoule has received UNESCO support and a UNDP proposal is in development. 'W' is supported by the European Commission, as does Niokolo Koba; the latter is linked to a UNDP/GEF project as well.

Other benefits and impacts

The introduction of viable and sustainable livelihoods in the areas surrounding the reserves has economic and human well-being benefits. It has been observed in other parts of Africa that if a biodiversity conservation area is perceived to be the recipient of special benefits and services, it can have the perverse effect of attracting more people, placing further pressure on the resource. Capacity building has economic and social benefits even if they are ultimately not delivered in the immediate context of this project.

Interventions of this nature run the risk of creating a dependency on international funding to maintain what should be a national and local responsibility. This can be mitigated by rigorously ensuring that what is supported is either clearly the 'additional' part of the expenditure (i.e., the expenditure which is necessary to secure a global benefit, but which would not reasonably have been incurred if local benefit was the sole objective), or that a clear path to self-sufficiency, including a realistic time-line, is mapped out.

Involvement of stakeholders

The generation of the proposal has been based on an extensive process of consultation. The objectives are those identified by the stakeholders themselves. The arrangements for future stakeholder involvement at the national, regional and local level are given in some detail. The proposed involvement includes meetings, the creation of structures, and training in conflict resolution. These will help, but real and sustained stakeholder engagement will depend on the delivery of tangible benefits.

Capacity building

The proposal would benefit from a quantitative analysis of how many people, at what levels, would be targeted for capacity building, and what form that capacity would take. How many higher degrees will result? How many people will attend workshops? How many articles books and guidelines are envisaged?

Innovation

Other than the fact that it is the first regional proposal of this type in West Africa, the proposal is generally not particularly conceptually innovative (and perhaps it does not need to be). It does not, for instance, address issues of the legal ownership and responsibility for natural resources, or propose specific new ways in which sustainable benefits could accrue from the resources. There are interesting developments in community-based monitoring of biodiversity that could be included in the proposal.

Recommendations

1. The proposal relates to an area of important biological diversity that is under current threat.
2. The proposal needs to make a more convincing case that the incremental funding will lead to a substantial and sustained global benefit.
3. The proposal can be improved to a point where the benefits are obvious. In particular, more attention needs to be given to
 - a. the longer term vision of how all the past and future short-term interventions will lead to a situation where continuous crisis-driven responses are no longer necessary; i.e. how social and economic sustainability is to be achieved;
 - b. a rigorous analysis of what aspects and regional fractions of biodiversity can be protected by a focus on this set of reserves, based on information already available in the open literature;
 - c. more specifics regarding the types of viable land-use strategies that can be developed, based on learning in other parts of Africa, since there is too little time within the project to commence without any idea of what these might be;
 - d. greater leverage of the regional aspects, showing how a regional approach is better than a piecemeal approach;
 - e. a capacity-building plan that is based on a needs analysis and sets quantitative targets.

ANNEX 9 C.
RESPONSE TO STAP ROSTER EXPERT PROJECT REVIEW

UNEP General Comment on STAP Review

We would like to thank the STAP reviewer for the exhaustive and comprehensive review of the proposal. We appreciate the constructive nature of many of the suggestions for clarification, refinement and improvement. We have attempted to clarify and respond to the issues raised in the comments that follow. In addition, we have amended the version of the project proposal he reviewed in response to various suggestions made.

One general remark concerns the clarification of the work and consultations carried out during the PDFB process, a project design activity that has lasted 2 years. In each country, national consultations were held within the biosphere reserves and at the national level to discuss with the various stakeholders about the project so as to avoid duplication and ensure complementarity with on-going or planned projects in the same sites or on similar themes. National scientific reports were developed, compiling the needs for information to aid management and capacity building levels for all the six biosphere reserves. These proposals were synthesised at the regional level in Dakar, in February 2002. Each country was represented by the national scientific consultant, the MAB National Committee focal point, a representative of local communities and the biosphere reserve managers. All knowledge/information gaps and training needs were therefore the needs identified by the participating countries, through consultations at the biosphere reserve level (local), national levels and regional levels.

The six countries have produced national reports, describing the biodiversity in each site, the main threats and problems they were facing and the activities they wanted the project to support in the next four years.

All of these supporting documents were of course produced in French, and due to budgetary constraints, funds were not available to translate the documents into English. For those areas where the STAP reviewer believes that the information provided in the existing proposal could be bolstered (biodiversity descriptions, capacity building plans and strategies) we translated and summarized the key information from these thematic areas in an Annex and have referenced the French documents in Annex M. In addition, the document has been strengthened with more explicit and detailed descriptions of West African savanna biodiversity (para 4 and Table One), inclusion of targets for capacity building within the logframe (see Annex B), the translated summary of the capacity building strategy as Annex K, and a description of the participatory design process that was executed during the PDF B stage (see footnote two and Annex L).

UNEP Response to STAP Comment on Scientific and Technical Soundness

In reference to the STAP reviewer's suggestion that "even better case would incorporate a landscape and habitat (ecosystem) analysis...", we would agree with the STAP reviewer. The ecosystem approach will be used and tested. The analyses carried out during the programme will be undertaken in the core area and in the transition zone of the biosphere reserve, so as to compare the impact of selected human uses and practices on the ecosystems. Expected outputs will therefore be: qualitative and quantitative descriptions of the consequence of selected uses and practices in the core areas, maps of impacts of selected uses and practices in the core areas and transition areas of each biosphere reserve.

The very targeted intervention proposed through this small investment is meant to meet a very specific need identified by the countries. Building scientific and technical capacity of local and national individuals and institutions as is proposed in this intervention will complement ongoing national and international investment in these reserves and help ensure sustainability of the entire suite of ongoing interventions in the BRs. Only in combination and complementary to existing baseline investment will a sustainable future for the reserves be established. The purpose of the project (in the language of the logframe this is what the project is expected to deliver) is "to systematically strengthen scientific and technical capacity for effective management of the reserves". The project development goal, as is noted in the logframe, is the "conservation and sustainable use of globally significant dryland biodiversity". In the language of the logframe, the development goal is something to which the project contributes not what the project is expected to produce. In the case of this particular initiative, many other projects and actions will contribute to the development goal of the project as noted in Annex J. The nature of this intervention is very different than the comments of the STAP reviewer seems to expect out of the project and thus the project should not be judged against that but rather against what is noted in the project logframe as the project purpose. National and local stakeholders have identified key gaps and barriers that they wish to address through this targeted intervention. However, we note the STAP reviewer's confusion and have clarified the presentation of the proposal such that the nature of the intervention is very clear.

Particular aspects and levels of biodiversity

During the PDFB phase, a regional technical meeting was held in Dakar, Senegal with representatives of the six countries involved in the project. Each country was represented by a key scientist, the MAB National Committee focal point, the manager of the biosphere reserve and a representative of local communities. They expressed their needs and shared their views about the outcomes of the project. One main concern aired by the six countries was the difficulty to define biodiversity (in terms of the CBD Convention), how it was perceived differently by the various stakeholders, and the necessity to develop indicators in order to compare the six sites.

During the Dakar meeting, it was also emphasized that local communities were perceived as crucial to the management of each biosphere reserve, but that also they were perceived as the main problem in reaching an effective integrated management of the biosphere reserve. Traditional knowledge of local communities was recognized as useful, but mostly seen as "folkloric".

Finally, the six countries have indicated that much data are available on the inventory of fauna and flora. Some good examples are from Comoé biosphere reserve in Côte d'Ivoire as well as

in Senegal. These surveys have been thoroughly detailed in the six national reports that were not attached to the document for the reasons noted above given translation costs.

The ecosystem approach, as applied in the MAB programme and recommended by the CBD is the approach that will be applied in the project, recognizing that people are integrated into these ecosystems. The project will serve to improve knowledge of ecosystem function and structure. It will also define the roles of the components of biological diversity in these ecosystems, especially in terms of understanding more deeply a) ecosystem resilience and the effects of biodiversity loss (species level) and habitat fragmentation; b) determinants of local biological diversity in management decisions (ecosystem level).

Explicit in the ecosystem approach is that the benefits derived from biological diversity should be distributed equitably among human populations and subsequent use. In particular, biodiversity should benefit the stakeholders responsible for its production and management. Attaining this objective requires capacity building, especially at the level of local communities managing biological diversity in ecosystems and the proper valuation of ecosystem goods and services. Ecosystem management has to incorporate the diversity of social and cultural factors affecting natural-resource use. Therefore, the study of traditional ecological knowledge, which needs specialists in ethno-sciences is a key component in the project.

The most significant issue that the management information and training programmes will address is: “how to manage the interactions between human societies and ecosystems in the biosphere reserves”. Based on the request of the six countries and their representatives activities geared towards generating management information will mainly focus on interactions between ecosystems and human societies. This approach means identifying the variability, instability and changes that are at the heart of all living systems, natural or social. Since ecosystem processes and functions are complex and variable, associated with a high level of uncertainty and difficult to measure directly, the project intends to build “interaction indicators”. The building of interaction indicators in the six countries is part of the global efforts of monitoring in MAB. Following the BRIM initiative at the global level, this project will serve as a contribution to a global effort. At the scientific level, the building of such interaction indicators will be innovative since it will build on perceptions of biodiversity at the local level, with the active participation of community and staff of the biosphere reserve. These programmes will therefore concentrate on the following identified uses and practices that are common to all six sites, where conflicts of sustainable resource use and biodiversity conservation arise: Agriculture and biodiversity; Fishing and biodiversity; Pastoralism and biodiversity, Collecting fire wood and biodiversity, Hunting and biodiversity, Tourism and biodiversity.

For each of these activities, the inventory and analysis of local modalities and institutions for managing resources will be assessed. The development of such indicators and sound socio-economic research will be a contribution to the development of institutional capacity building, so to strengthen existing institutional structures for managing resources at the local level (local communities institutions, coordination and management structure in the biosphere reserve) and at the national level (support to MAB National Committees, establishment of official linkages between research and training institutions and biosphere reserves as demonstration sites).

Individual and Institutional capacity building

We fully agree with the STAP reviewer that political commitment at the national level is

essential for success for the project, as well as the national ability to implement national biodiversity conservation policy on the ground, linked with a genuine perception by local community that the protection and sustainable use of resources are crucial. The project aims to build sustainable links, and connections between the various stakeholders involved in the management of the site by facilitating dialogue between the local communities and the managers, through the development of information/knowledge to improve conservation management, taking into account stakeholder knowledge and needs concerning biodiversity, their livelihood options and future perspectives. The project aims to involve local communities and other key stakeholders in management discussion and negotiation, through detailed analysis of local structures and institutions for managing resources, through providing training in conflict prevention and resolution in each biosphere reserve and at the regional level, through interdisciplinary work and research, involving existing national research and environment institutions and the MAB National Committees.

The project will serve to demonstrate and establish the role of biosphere reserves as field sites for monitoring, environmental education and development of information for conservation management, by initiating formal procedures between national scientific and training institutions and the management authorities of the biosphere reserves and by strengthening local and national institutions for sustainably managing resources in the sites over a long term period. The project will demonstrate how biosphere reserves could serve as operational sites for developing national sustainable development strategies and thus responds to, *inter alia*, one of NEPAD objectives as to find operational sites for testing sustainable development strategies.

Information, communication, dissemination

The information, communication and dissemination strategy will use local and national communication tools (radio, TV) but will also build on publications, participation to regional thematic workshops, exchange of national scientists including higher-level student exchanges. The project will also produce guidance material and case studies on conflict resolution and on biodiversity uses and practices in biosphere reserves (i.e. fisheries, pastoralism, hunting) which will be translated into local languages, French and English and will be disseminated at the national and regional level, using MAB regional and thematic networks.

UNEP Response to STAP Comment on Regional Context

We agree that we could make this case more convincingly in the text and will include this description below in the main body of the proposal (see paragraph 32).

The regional dimension of the project will add value to achieving the project purpose in the area of scientific and technical capacity and institutional strengthening as detailed below:

Scientific and Technical Capacity

- An increased understanding of ecological processes across a gradient of biophysical and human cultural conditions that are representative of W African savannas will support more informed management decisions within each reserve and, over time, in other protected areas outside the scope of this project. In addition, application of common impact indicators of human activity for comparison of the sites and tested at the regional level will enhance understanding of human impacts at the reserves and provide needed scientific input to management decisions. This cooperation will allow for a regional biodiversity conservation and monitoring system of west savannas in place and functioning through the AfriMAB network.

- A functioning regional biodiversity information system exchanging data and information (including best practices in sustainable use) and a biodiversity expertise network will contribute to improved management throughout the reserves and the region. Expected contributions of case studies on biodiversity and on conflicts related to access and use of resources; and analysis of local and national institutions responsible for managing resources will permit comparative analyses of lessons learned and best practices.

Institutional Strengthening:

- The reinforcement of the AfriMAB network will facilitate exchange of learning, skills and experience in similar ecosystems being managed under similar structures, i.e., biosphere reserves.
- A strengthened and more effective AfriMAB network will improve cooperation in the management of West African savanna ecosystems and raises awareness of the importance of savanna ecosystems in the region.
- Improved communication and information-sharing occurring between the six sites and the six MAB national committees will result in strengthening the management systems/institutions of the individual biosphere reserves.

UNEP Response to STAP Comment on Replicability:

The sustainability of these areas is dependent on the long-term preservation of the core areas of these six biosphere reserves. This is precisely where the biosphere reserve approach is essential, by combining conservation objectives with sustainable development ones. Therefore, participation and long-term support of local communities are essential and this will be achieved through building long-term institutional platforms for permanent dialogue and management of resources in each of the biosphere reserves. Potential areas for creating and developing new biosphere reserves exist elsewhere and the project approach could be replicated. The “W” region transboundary Biosphere Reserve (Benin, Burkina Faso and Niger) was designated by the MAB Bureau in 2002. The ministries of environment of the three countries jointly submitted the nomination file to the MAB Secretariat, demonstrating the political will and the demand for such a regional tool for preserving savannas in West Africa.

UNEP Response to STAP Comment on Sustainability

We agree that the issue of sustainability is crucial and we agree with the STAP reviewer on the complexity of reaching such an objective. A key to sustainable functioning of a biosphere reserve is the continued support of all stakeholders. This requires a coordination mechanism that involves credible and legitimate institutions and that provides tangible benefits to local people. The project aims to support existing local and national institutions, to facilitate a permanent dialogue between the different stakeholders in each biosphere reserve by building on local existing rules, customs, institutions to manage the resources, access and control of resources. To decrease the dependency of the six sites on external aids, institutional and financial solutions will be explored.

The Pendjari Biosphere Reserve is presently studying the possibility of creating a trust fund for the Pendjari Biosphere Reserve. This study will be shared with and explored in the five other biosphere reserves. We think that such local initiatives could be explored and developed in a short-term period and could lead to financial self-sufficiency. Another source of income for each biosphere reserve is eco-tourism. This is one of the thematic issues to be studied and explored during the project in each of the six biosphere reserves. One key need expressed by

the national authorities during the PDFB process was how the biosphere reserve could increase the sources of incomes, and eco-tourism at the regional level is seen as a promising option, which requires further study. Regional cooperation on ecotourism is important and is backed up by initiatives such as the creation of a regional tourist visa between biosphere reserves and parks in Niger, Burkina Faso and Bénin. Tourists can benefit from the three biosphere reserves in one visit. Game hunting is also an important source of income for some biosphere reserves such as Pendjari. This option is also one of the thematic issues that will be addressed by the project. Information about potential and existing income from such activities stem from a genuine demand at the political level. The project aims to demonstrate how biosphere reserves are potential sites for developing income for the park and for local communities, without compromising the health of the savanna ecosystems.

Another key issue for sustainability is institutional capacity building. As part of the extensive studies of local institutions and coordination structures within each biosphere reserve, and the involvement of local communities and other key stakeholders in the management of the biosphere reserve, it is planned that a substantive reduction of conflicts for access and use to resources in the six sites will happen. The organization of training for conflict resolution in each site and at the regional level will also facilitate the identification of local and national mediators. In each biosphere reserve, there exist individuals who are called upon for solving conflicts between groups of villagers or between the villagers and the staff of the biosphere reserve. The projects intend to identify these local mediators, to train them and to use them as trainers in a second step. This process will allow for legitimisation of local mediators in each biosphere reserve at the end of the project, who will be acknowledged by each country. One concrete output of the regional project will be a list of recognized mediators for each biosphere reserve who could also be called upon as experts for conflict resolution at the regional level.

The efforts will concentrate on increasing collaboration between the various institutions and agencies working in the field of environment and research in each country and at the regional levels.

UNESCO has some positive examples where an investment of initial funding led to sustainable institutions in different regions of the world. This is the case for example in ex-Zaire, where UNESCO helped to create the first Pedagogical National Institute (Institut Pédagogique National). This Institute is presently training university teachers for the sub-region of Central Africa. Another example in Africa is the case of the Institut Congolais pour la Conservation de la Nature (Congolese Institute for the Nature Conservation). This institute was supported by a consortium of UNESCO/IUCN/WWF/Zoological Society of Frankfurt/ European Union and started to implement an ecotourism policy for mountain gorillas. Some marketing activities were initiated, such as the production of guide/manuals and videos, which have generated substantial revenues for the parks in Congo. Such examples have inspired the preparation of the present project, based on the demands of the biosphere reserve staff and local communities. During the PDFB, local community representatives requested the project to provide them training in microenterprise development. The production of guides, manuals for the biosphere reserves, as well as videos is planned in the regional project. The main thematic areas that will be covered by the project, i.e., eco-tourism, hunting, collecting, pastoralism, etc., are crucial socio-economic activities that the countries consider as an essential element of the sustainability of each site. These issues are being addressed because they are perceived by local and national stakeholders as being at the heart of the sustainability of the sites.

UNEP Response to STAP Comment on Linkage to Other Focal Areas

The project focus is primarily on the conservation of dryland biodiversity, an overlooked and underfinanced aspect of the GEF biodiversity portfolio. Cooperation with ROSELT and OSS for long term research and building of indicators may, in the medium to long term, provide the opportunity for contributing to the objectives of Convention on Combating Desertification.

UNEP Response to STAP Comment on Other Benefits and Impacts

The GEF exists to assist countries to meet the incremental, additional costs to conserve globally significant biodiversity. The proposal seeks funding to assist countries to better manage their Biosphere Reserves, by definition a globally significant resource, through strengthening national and local scientific and technical capacity. The issue of sustainability is addressed above.

UNEP Response to STAP Comment on Involvement of Stakeholders

As noted above, exhaustive stakeholder consultation (referenced in numerous places in the proposal including footnote one and Annex L) was conducted during the PDF B. Each country has conducted national consultations and local consultations (biosphere reserve level). A representative of local communities of each site attended the regional meeting. During the regional meeting, these representatives expressed their needs for training, access to micro-credits, and translation of information documents in local languages.

The PDFB started the dialogue amongst the scientific community, the conservation institutions, local communities as well as NGOs and the private sector. After the regional meeting, local community representatives organized a “restitution” seminar in each biosphere reserve to inform villages about the proposals made during the Dakar regional meeting. Some biosphere reserves have an institutional structure, such as AVIGREF in Pendjari Biosphere Reserve, which aims to represent all local communities. This is not the case of Niokolo Koba for example. Annex E describes the institutional arrangements for each biosphere reserve, at the local level, all of which aim to involve local communities. Study of the existing local institutional arrangements for stakeholder participation will be carried out during the project to evaluate the efficiency and sustainability of these institutions for the management of the biosphere reserve. Local communities, biosphere reserve staff and scientists were very keen to learn about experiences of the other countries. Therefore, one of the first benefits to them is to learn from each other, to have trained people who will stay on the site to assist with them thereafter, and to implement a process for permanent and long term consultation and discussions.

UNEP Response to STAP Comment on Capacity Building

This analysis was conducted during the PDF B process. These are preliminary quantitative outputs that we will include in the project document in the logical framework:

2 Phd students per country : 12 Phd

4 master degrees students per countries: 24 master degrees students

National training and regional training: 150 persons directly trained

Identification and training of local mediators: 2 per biosphere reserve

Scientific articles: 6

Popular science articles: 10

Book: 1
Methodological guidelines and case studies papers: 7
Regional internet web site: 1

A summary translation of the capacity building strategy is now included as Annex K.

UNEP Response to STAP Comment on Innovation

Legal institutions and practices are being studied in the project and form the basis of Component One. These questions are at the heart of the project and this should be stated more clearly in the document. Community based monitoring of biodiversity is to be developed in the second component (substantiation of traditional knowledge). It is specified in paragraph 51 under Component Three (long term institutional mechanism will include integration of indigenous technical knowledge into the management plan, including knowledge of biodiversity, i.e. sustainable use and monitoring). As mentioned in table 3, studies on local economies (standards of living, incomes, social rules and institutions), on perceptions of local communities on ecosystems and the biosphere reserve, and on local knowledge on biodiversity are planned for the six sites.

The project will be the first group of biosphere reserves in an important biome that will be supported to jointly develop a common scientific base, harmonized management and capacity building through regional GEF support. This group approach of building a network for exchange of information and experience has not been attempted so far in this region.

UNEP Response to STAP Recommendations

STAP RECOMMENDATION:

The proposal relates to an area of important biological diversity that is under current threat.

The proposal needs to make a more convincing case that the incremental funding will lead to a substantial and sustained global benefit.

The proposal can be improved to a point where the benefits are obvious. In particular, more attention needs to be given to

- the longer term vision of how all the past and future short-term interventions will lead to a situation where continuous crisis-driven responses are no longer necessary; i.e. how social and economic sustainability is to be achieved;
- a rigorous analysis of what aspects and regional fractions of biodiversity can be protected by a focus on this set of reserves, based on information already available in the open literature;
- more specifics regarding the types of viable land-use strategies that can be developed, based on learning in other parts of Africa, since there is too little time within the project to commence without any idea of what these might be;
- greater leverage of the regional aspects, showing how a regional approach is better than a piecemeal approach;
- a capacity-building plan that is based on a needs analysis and sets quantitative targets.

UNEP RESPONSE:

We would like to emphasise that a) this project derives from priorities and needs expressed by the countries, b) the project targeted interventions are complementary to existing on-going investments and projects; c) the targeted nature of the intervention is to systematically increase local and national scientific and technical capacity; d) that the regional nature of the intervention and the existing AfriMAB support network is a sustained and substantial global benefit for the West Africa region, as are other initiatives at the regional level such as transboundary biosphere reserves. The focus of the project on strengthening individual and institutional capacity and on reinforcing the institutional and scientific links between the countries and the biosphere reserve through an established network makes it a long-term investment in capacity development in the region. Sustainability of this project's outcomes will mainly rely on individual and institutional capacity building to guarantee the long term support of local stakeholders for the preservation and sustainable development of the biosphere reserve, and to guarantee the support of national authorities for the use of biosphere reserves as demonstration sites for sustainable development activities and preservation of savanna ecosystem. We have more clearly presented this aspect of the intervention strategy in the proposal and in particular with the inclusion of Annex K.

Socio-economic sustainability needs to rely on a comprehensive understanding of the interests of all actors involved in the management of the site. Benefits and socio-economic alternatives which will be explored in the project (e.g., creation of a trust fund for the biosphere reserve, development of eco-tourism and game hunting activities, benefits sharing through institutional agreement, etc.) will be derived from this careful analysis. Experience in other biosphere reserves in Africa and elsewhere in the world showed that sustainability starts where a permanent dialogue is made possible through a variety of institutional and individuals arrangements, respected and recognized by all stakeholders involved.

We have included in paragraph four and Table One a more explicit analysis of what aspects of biodiversity can be protected by a focus on this set of reserves.

More specifics regarding the types of viable land-use strategies that can be developed have been specified in the revised logframe.

The added value of the regional approach is discussed in Annex J and in paragraph 32.

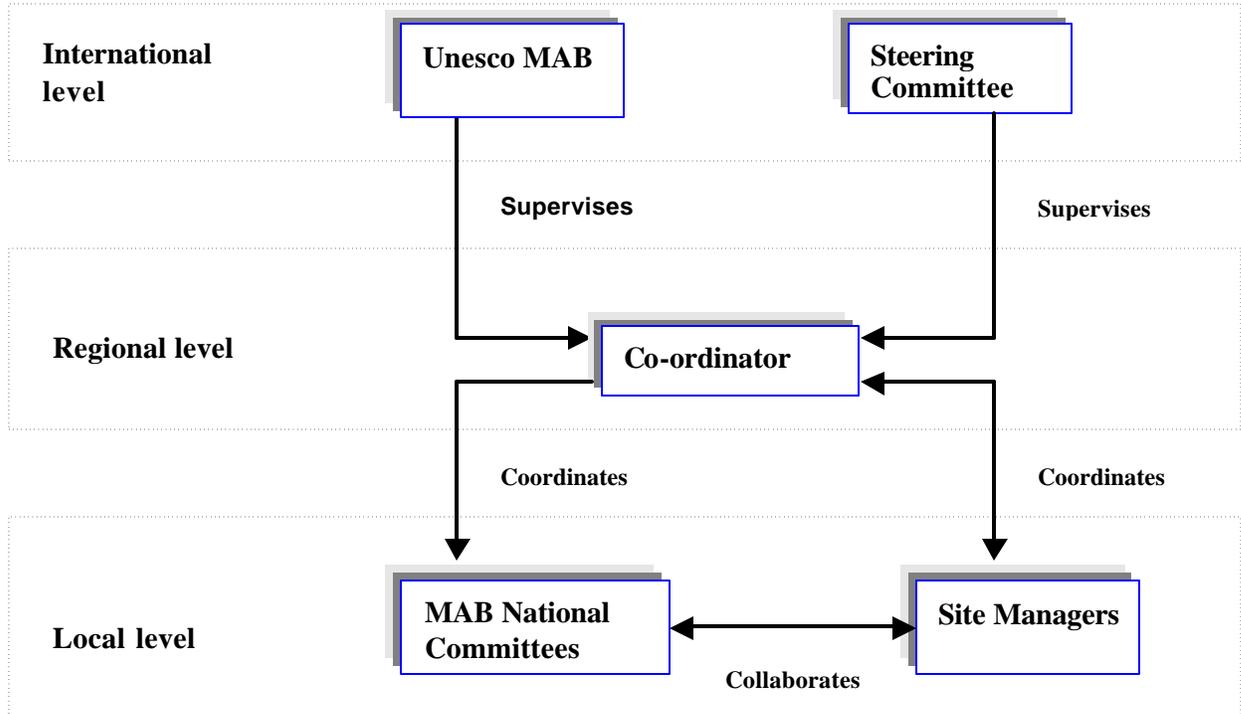
A translated summary from the original French version of the capacity building strategy has been included as Annex K and quantitative targets are now included in the logframe.

Annex 9 D.

Letters of Endorsement (as separate attachment PDF)

Annex 9 E.
Public Involvement and Project Coordination Plan Summary

Figure E 1. Diagram of Regional Coordination Structure



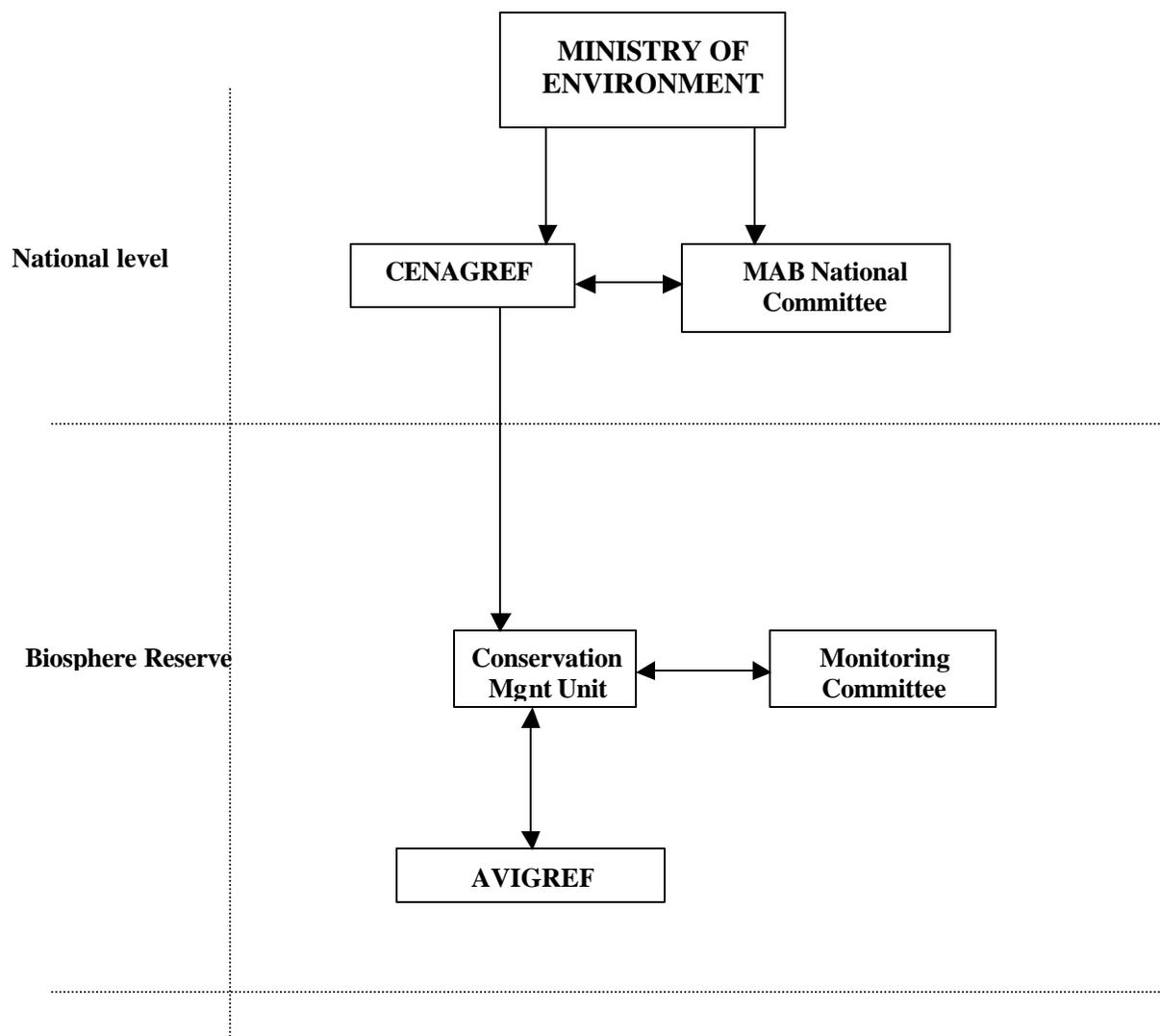
The implementation of the project in each country will rely on MAB National Committees and the institutions responsible for the conservation and management of the biosphere reserve.

In each country, cooperation will be established with national scientific and research institutions in order to implement the applied research workplan.

Building on relationships established during the PDF B, the MAB National Committees, the Regional Coordinator and the site managers will ensure that the implementation of activities is fully coordinated with other projects being implemented in the biosphere reserve.

In each biosphere reserve, institutional arrangements may vary from one country to another. Some countries already have established a coordination structure within the biosphere reserve to improve management of the biosphere reserve and to include the participation of local communities into the decision making process. Some countries are planning to improve the existing management and conservation structures in the biosphere reserve during the project.

Figure E 2. Diagram of Benin National Coordination Structure for Pendjari Biosphere Reserve



AVIGREF: Representative of local communities
 CENAGREF: National Centre for the Management of Fauna Reserves

Benin National Coordination Structure

The central management unit (Direction Générale) of CENAGREF is in charge of the regulations governing fauna reserves and the sustainability of activities in the protected areas

of Benin in general and the Pendjari Biosphere Reserve in particular. CENAGREF will serve as the co-ordinating institution for the activities of the project at the national level in collaboration with the MAB National Committee. CENAGREF controls the implementation of activities according to the Annual Work Plan which are elaborated in a participatory manner with the Conservation Management Unit of the Pendjari Biosphere Reserve, the Focal Point of UNESCO-MAB for Benin, research institutions (ABE: Agence Béninoise pour l'Environnement and The Benin National University) and the Representative of Neighbouring Villages (AVIGREF).

The fundamental tasks of CENAGREF will be to:

- Co-ordinate monitoring activities and analyse results
- Contribute to the planning of studies and use of results
- Ensure reporting and internal evaluation initiatives
- Manage the finances of the project.

The Conservation Management Unit of Pendjari Biosphere Reserve main functions are to:

- Co-ordinate field activities on priority sites
- Ensure the participation of local populations in research-development work in the demonstration sites
- Contribute to the selection of target groups for the training programme
- Manage resources put at the disposal of the field research team
- Contribute to the planning of studies and use of results
- Manage funds and equipment in the field
- Ensure reporting and provide accounts to CENAGREF
- Participate in regional meeting with other conservators of biosphere reserves involved in the regional project.

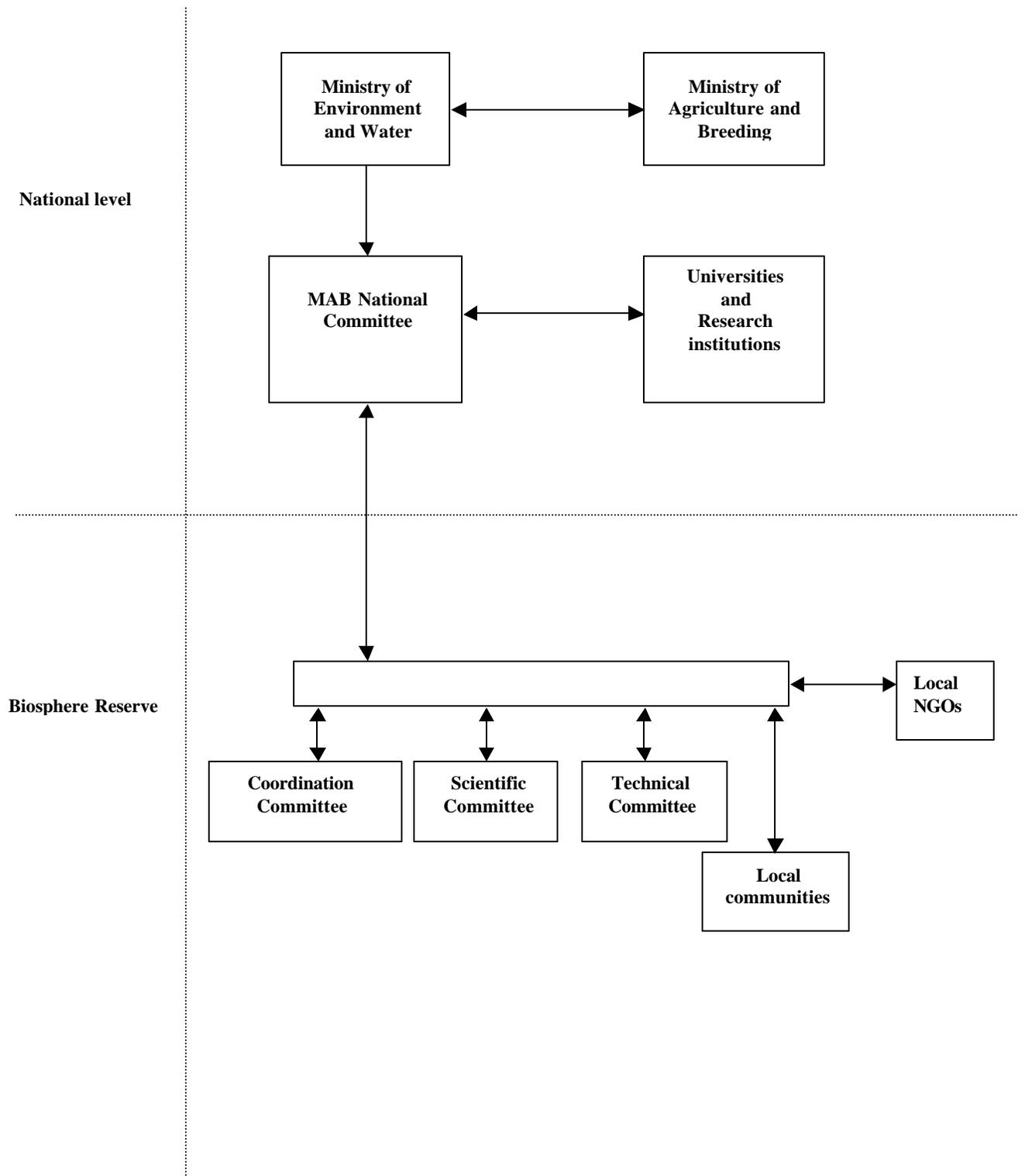
The UNESCO-MAB Focal Point will have the following tasks:

- Contribute to the planning of studies and use of results
- Ensure that the Annual Work Plan is respected
- Undertake an external evaluation of the project
- Facilitate relations between donors and CENAGREF
- Report and provide accounts to UNESCO-MAB
- Participate in regional meetings of exchanges between other UNESCO-MAB focal points involved in the regional project.

The activity and financial reports will be prepared each semester by the scientific team, the Conservation Management Unit of the Pendjari Biosphere Reserve, the CENAGREF and the MAB Focal Point. These reports will be used for internal evaluations and for planning activities at the end of the year.

The CENAGREF, the MAB Focal Point, the Conservation Management Unit of the Pendjari Biosphere Reserve, the Representative of Neighbouring Villages (AVIGREF) and the scientific team will be part of a monitoring committee for the implementation of the project. It will meet twice a year to monitor activity reports and state of progress.

Figure E 3. Diagram of Burkina Faso National Coordination Structure for Mare aux Hippopotames Biosphere Reserve



Burkina Faso National Coordination Structure

The Ministry of Environment and Water (MEE) is the institution responsible for the MAB National Committee and for other institutions intervening in the biosphere reserve such as National Center for Forest Seeds (CNSF), the National Institute of Water and Forests of Dinderesso at Bobo Dioulasso (ENEF) and the regional Hydraulic Service. These last three institutions are providing support to the Mare aux Hippopotames Biosphere Reserve for conservation and for research and training activities.

During the PDFB, the suggestion was made to create a coordination committee, a scientific committee and a technical committee to oversee the execution of the activities to be implemented at the National level.

The coordination committee would be composed of the MAB National Committee focal point, a scientific consultant, representative of local populations, forest guard, representatives of the private and public sector. The coordination committee will be charged with the implementation of the workplan of the project.

The technical Committee will be composed of:

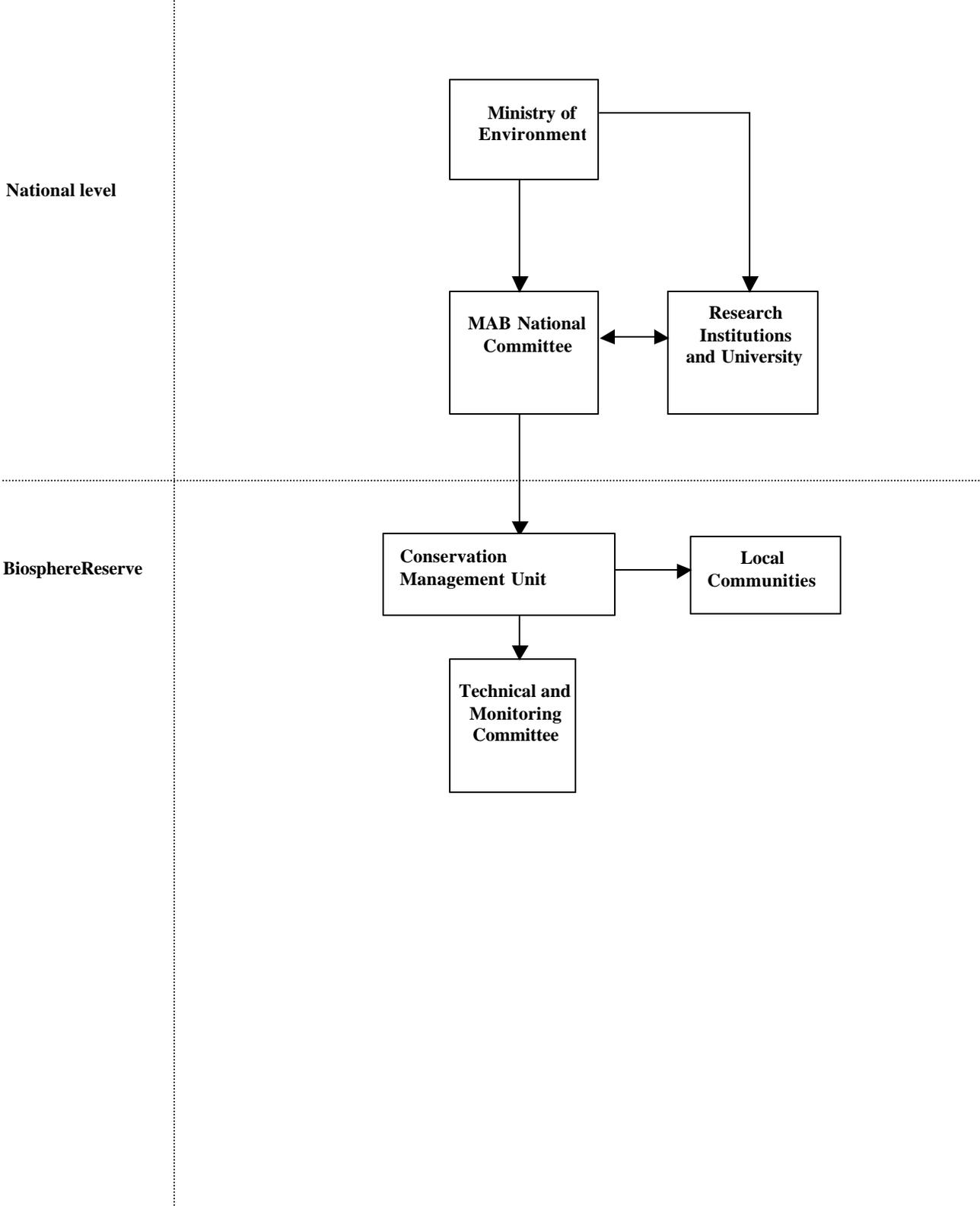
- Representative of MAB National Committee
- Scientific team representative
- Representative of the local communities
- Representatives of other projects intervening in the biosphere reserve such as PAGEN, PNGT, CNSF etc.

The technical committee will assess, on an ongoing basis, the technical feasibility of the workplan and management plan of the Mare aux Hippopotames, and thus will serve as upstream technical advisor to the coordination committee in charge of the execution of the workplan.

The scientific committee will be charged with the implementation of the scientific programme of the Project and be composed of:

- Representative from Ministry of Secondary, Higher Education and Scientific Research
- Representative of CNRST
- Representatives of The University of Ouagadougou,
- Representatives of the University of Bobo Dioulasso
- MAB National Committee.

Figure E 4. Diagram of Côte D'Ivoire National Coordination Structure for Comoé Biosphere Reserve



Côte d'Ivoire National Coordination Structure

The various departments of the Ministry of Environment provide support for conservation of the Biosphere Reserve and is the institution responsible for the MAB National Committee of Côte d'Ivoire.

The MAB National Committee will co-ordinate the workplan in the Comoé Biosphere Reserve and in particular be responsible for

- Contributing to research planning and use of results
- Controlling the execution of the annual Work Plan
- Carrying out external evaluation of the project activities
- Reporting and providing accounts to UNESCO-MAB Paris

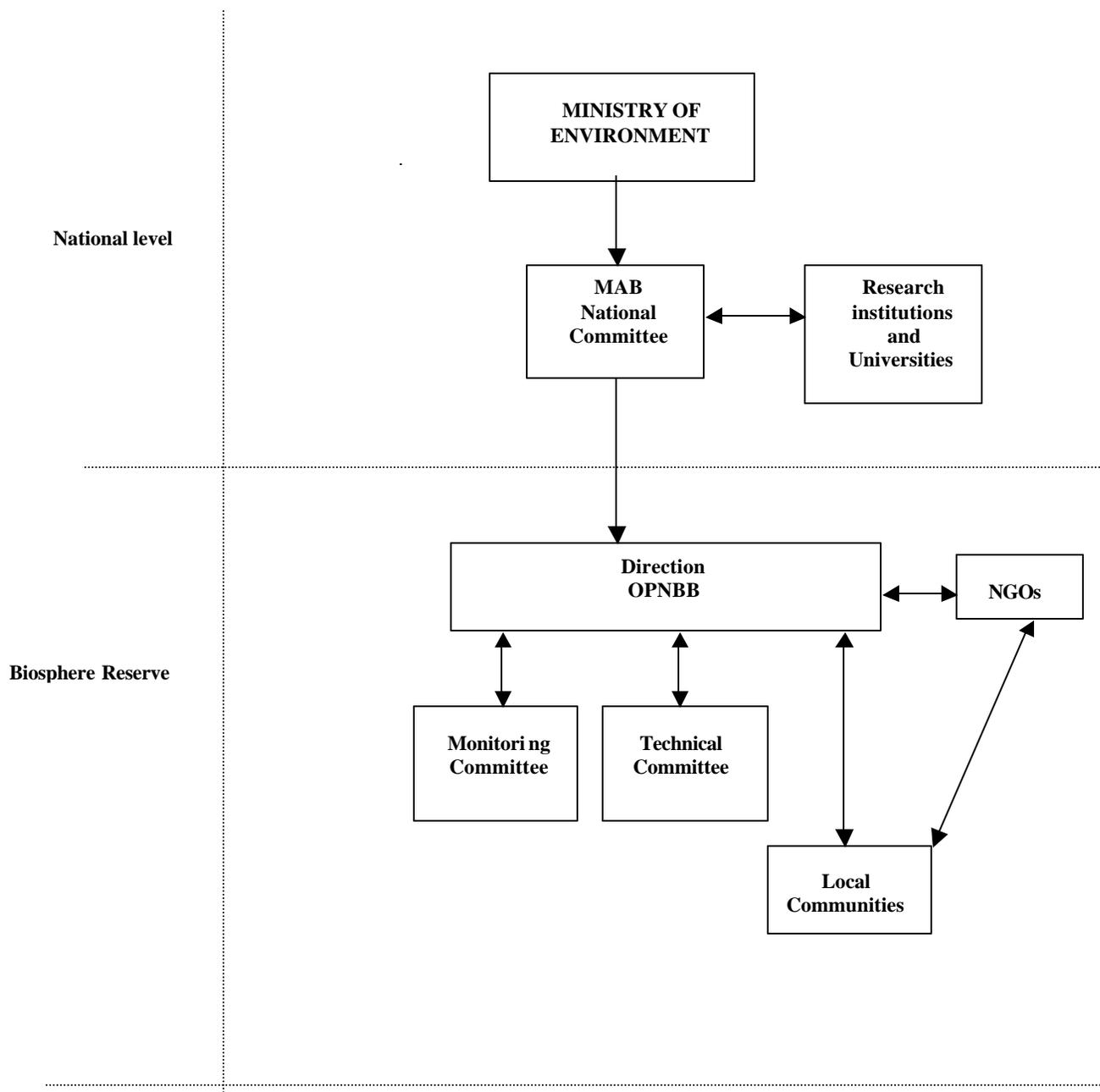
The Conservation Management Unit of Comoé will be charged with :

- Co-ordinating field activities
- Ensuring the participation of local populations in research-development work in the demonstration sites
- Contribute to the selection of target groups for the training programme
- Managing resources put at the disposal of the field research team
- Contributing to the planning of studies and use of results
- Managing funds and equipment in the field
- Reporting
- Participating in regional meeting with other conservators of biosphere reserves involved in the regional project.

At the national level, the University of Abobo-Adjame, the Centre for Tropical Ecology Research (CRE) and the University of Cocody-Abidjan will provide scientific inputs and will participate in the scientific research team.

MAB National Committee will ensure cooperation and coordination with, World Wide Fund for Nature, Abidjan, Conservation International and National Agency for Support of Rural Development (ANADER).

Figure E. 5 Mali National Coordination Structure for Boucle du Baoulé Biosphere Reserve



OPNBB : OPERATION PARC NATIONAL DE LA BOUCLE DU BAOULE

Mali National Coordination Structure

The Ministry of Environment is responsible for the MAB National Committee and for the OPNBB (Opération Parc National de la Boucle du Baoulé), the department in charge of the management of the Boucle du Baoulé Biosphere Reserve.

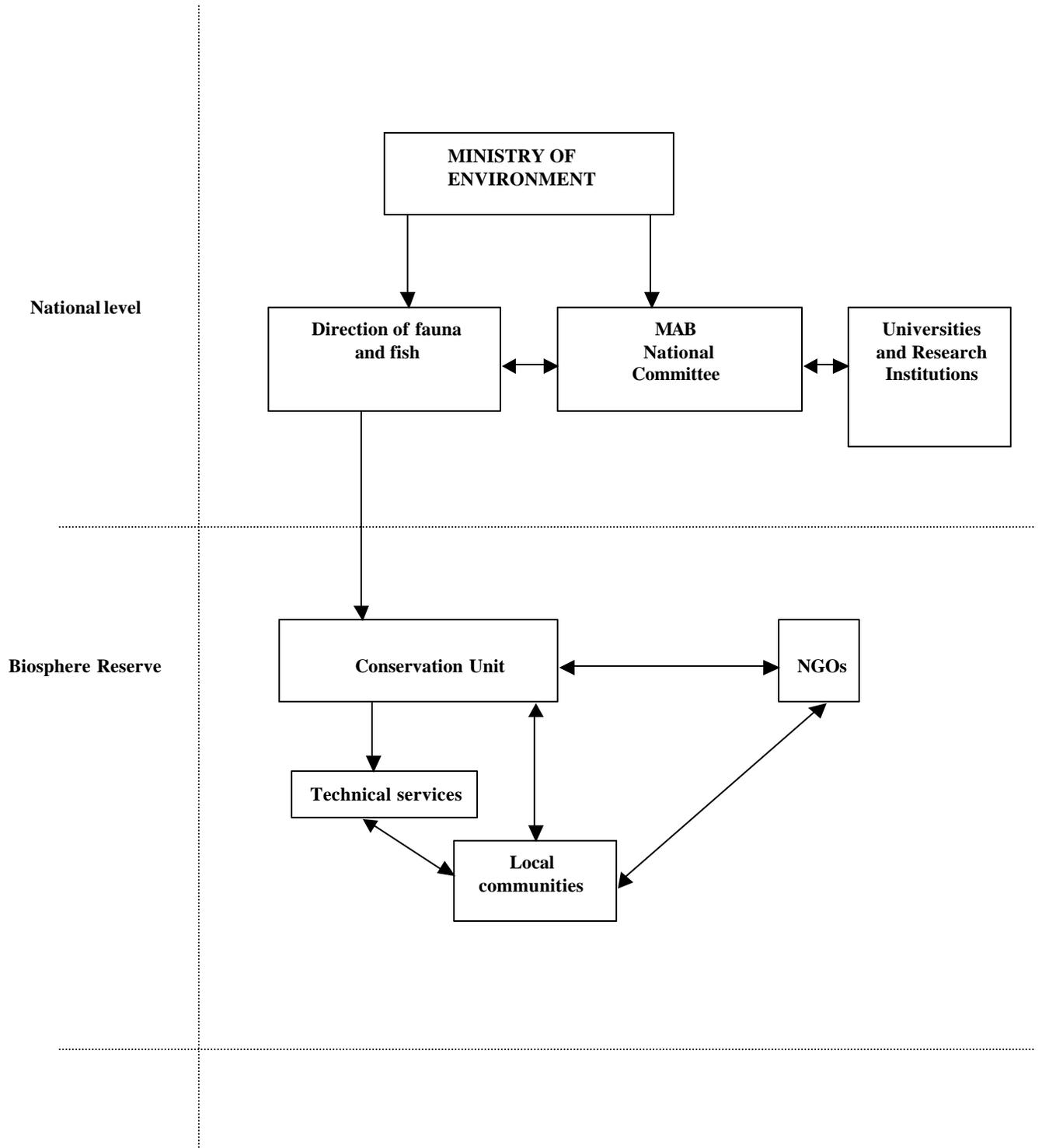
The MAB National Committee will be responsible for the overall coordination of the project in Mali. The OPNBB will be in charge of the implementation of the activities in the biosphere reserve.

The OPNBB will be assisted by two committees:

- a) Monitoring committee. This committee is chaired by the Minister of Environment and composed of representatives of concerned ministerial departments and representatives of local populations. The monitoring committee will be in charge of approving annual programmes and budgets and technical and financial reports elaborated by the director's office of the OPNBB.
- b) Technical Committee. This committee will be composed of representatives of organizations and institutions involved in operational activities in the Boucle du Baoulé Biosphere Reserve. The Technical Committee will report on the implementation of the approved work programmes.

On the scientific aspects, the University of Mali, l'IER (Institut d'Economie Rurale) will participate in the implementation of the workplan.

Figure E. 6 Niger National Coordination Structure for “W”Biosphere Reserve



Niger National Coordination Structure

The Ministry of Environment is the institution in charge of the MAB National Committee and of the Direction of Fauna and Fish, which is in charge with the “W” Biosphere Reserve.

The MAB National Committee will be charged with the overall co-ordination of the activities in Niger.

In the field, the Conservation Management Unit of the “W” Biosphere Reserve will:

- Co-ordinate field activities on priority sites
- Ensure the participation of local populations in research-development work in the demonstration sites
- Contribute to the selection of target groups for the training programme
- Manage resources put at the disposal of the field research team
- Manage funds and equipment in the field
- Participate in regional meeting with other conservators of biosphere reserves involved in the regional project.

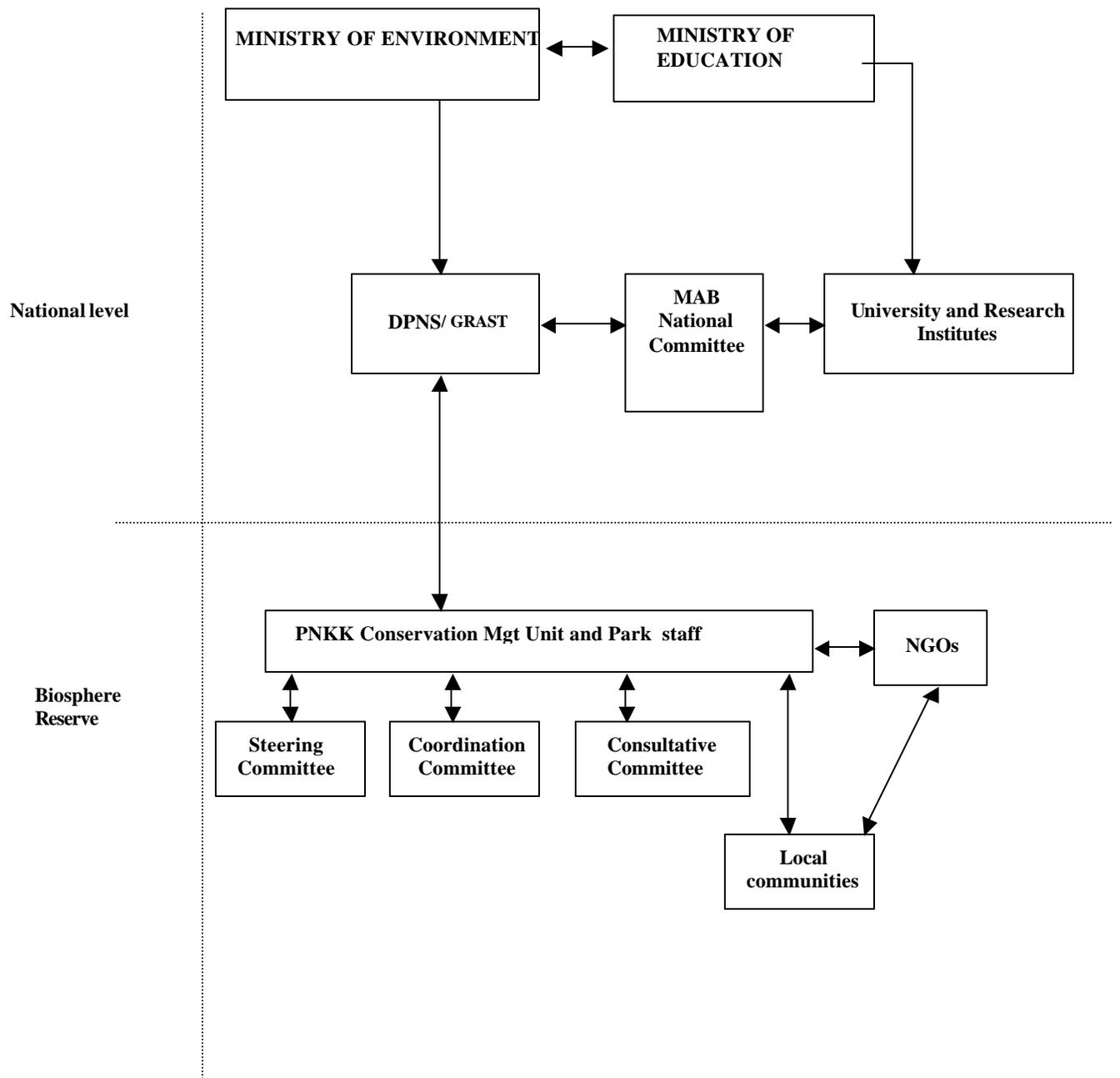
The Conservation Management Unit will receive support from the local partners (Technical Services of districts) in the following fields:

- Agriculture
- Cattle raising
- Water and Forest
- Rural/Agricultural Engineering
- Primary and secondary school
- Literacy Training

The MAB National Committee, in co-operation with the Conservation Management Unit of the “W” Biosphere Reserve, will ensure coordination of activities and exchange of information with the numerous NGOs, projects, associations and research institutes intervening in the “W” Biosphere reserve such as the Domestic Energy Project 2, Management of Natural Resources Project (PGRN), Niger Voluntary Organization for Environmental preservation (ONVPE), World Conservation Union (IUCN), ROSELT, Centre for International Cooperation in Agronomic Research for Development (CIRAD), W Park Regional Programme : Protected Ecosystems of Sahelian Africa (ECOPAS), etc.

The scientific component of the Project will be executed by the MAB National Committee in collaboration with the University of ABDOU MOUNOUNI, Niamey (Department of sciences, Department of Agronomy, Department of Humanity and Social Sciences, Department of economics and law), National Institute of Agronomic Research of Niger, and Polytechnic Institute for Rural Development of Kollo.

Figure E. 7 Senegal National Coordination Structure for “W”Biosphere Reserve



GRAST : GROUPE DE REFLEXION ET D'APPUI SCIENTIFIQUE ET TECHNIQUE DES PARCS NATIONAUX
 DPSN : DIRECTION DES PARCS NATIONAUX DU SENEGAL
 PNKK : PARC NATIONAL DU NIOKOLO KOBA

Senegal National Coordination Structure

The main national institution partners in the project are the MAB National Committee, the Delegation for Administrative and Scientific Affairs (DAST), and the Ministry of Environment and the Ministry of Education (MEN, responsible for the MAB National Committee).

The Niokolo Koba Biosphere Reserve is under the responsibility of the Office of National Parks of Senegal (DPNS). The DPNS and the MAB National Committee will be responsible for the overall co-ordination of the activities in Senegal.

The DPNS is assisted by a Think Tank and Scientific and Technical Support Group of National Parks (GRAST). GRAST was created in 2001 and is a consulting body in charge of formulating scientific and technical advice to the DPNS on the following items:

- 1) Identification, organisation and planning of research programmes on ecosystems and species;
- 2) Elaboration, co-ordination, supervision and evaluation of research protocols in connection with DPNS and the managing bodies of the protected areas in Senegal;
- 3) Implementation and follow-up of international conventions of which DPNS is the operational focal point; and
- 4) Elaboration of development and management plan which DPNS would like to establish in protected areas in Senegal.

At Niokolo Koba Biosphere Reserve, a collaboration and facilitation framework has been created to facilitate implementation of the management plan finalized in 2000. A steering committee, a coordination and a consultative committee have been officially established and will be operational during the implementation of the project. The MAB National Committee will participate in the coordination and steering committee of the Niokolo Koba Biosphere Reserve in order to ensure the links with the scientific aspects of the Project.

At the national level, the following University and Research Institutions have been identified to participate in the scientific team:

- University of Gaston Berger of Saint Louis (UGB)
- Ecological Monitoring Centre (CSE)
- Institute of Agricultural Research of Senegal (ISRA)
- Development Research Institute (IRD).

Collaboration with private companies, NGO's will be ensured through the work of the Coordination Committee of the Niokolo Koba Biosphere Reserve.

E8 : Stakeholder participation plan in each biosphere reserve and at the regional level

During the PDFB phase, the project facilitated the organization of local and national seminars in order to inform the various stakeholders of the beginning of a new project in each biosphere reserve. This process allowed the participation at the national levels of key stakeholders in each country: local communities; private sector, local and national administrations, universities and research institutions and conservation managers.

Local community representatives participated in the Dakar technical regional meeting, which was held in the UNESCO-Dakar Regional Office from 11 to 15 February 2001. The representatives of the local communities expressed their needs and interests within the global phase of the project and presented the main conflictual issues they were facing in each biosphere reserve. It was therefore decided that one aspect of the project will be to work on institutional structures within each biosphere reserve in order to manage and solve conflicts and to facilitate the internal dialogue between the various stakeholders in each biosphere reserve.

As described in Annex E, each country and each biosphere reserve has its own institutional arrangements to consult and inform various stakeholders, including local community representatives. The project will study the sustainability of these local institutional structures for allowing effective participation and articulation with decision making for the management of the biosphere reserve.

In each biosphere reserve, the following stakeholders have been identified as key stakeholders during the PDFB phase:

- Staff of the Biosphere Reserve
- Local and national administration in the field of environment
- Local community representatives
- Scientists
- MAB national committees representing various ministries and environmental institutions
- Private sector (tourism)
- NGO's

The following objectives will be addressed:

- a) to facilitate communication and exchange of information between the various stakeholders about the objectives of a biosphere reserve and the implementation of the activities of the project;
- b) to support to local structures and institutions facilitating conflict resolution and dialogue between the various stakeholders;
- c) to facilitate the creation of a coordination structure in each site where stakeholders are represented and participating in the decision-making process leading to the elaboration of the management plan, through such means as scientific, technical committee, and coordinating committee.

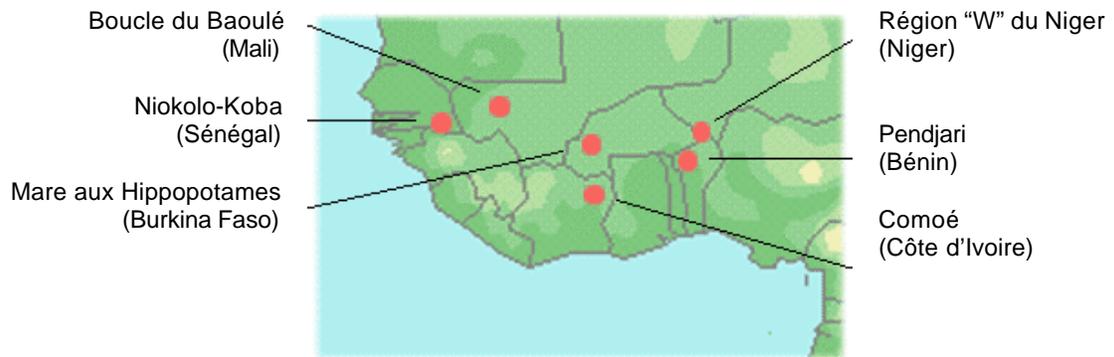
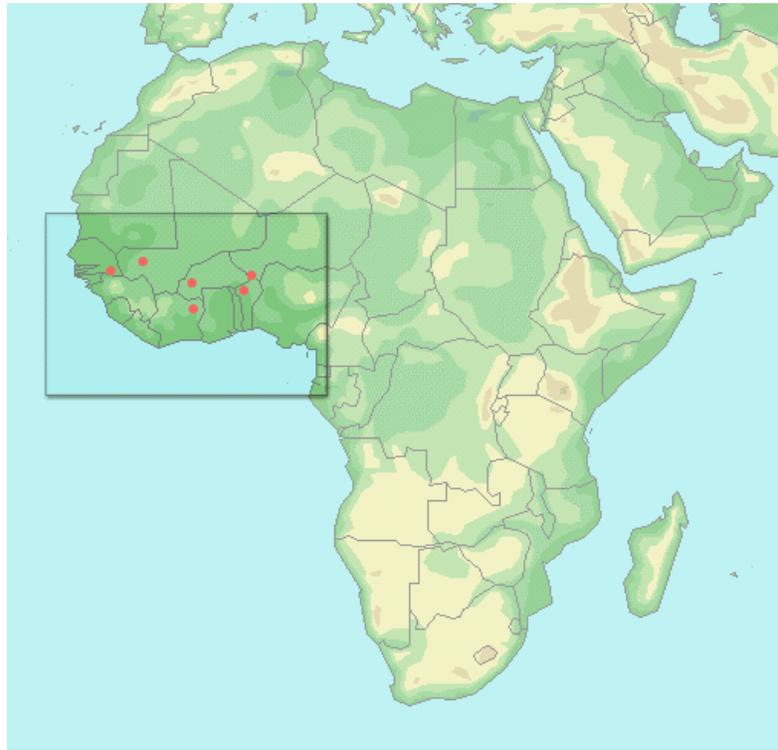
In each biosphere reserve, the following activities will be planned in order to facilitate the participation of the various stakeholders, based on the existing mechanisms described for each site in the same Annex:

- a) support to existing sustainable consultative and decision making structures (scientific committee, and such as AVIGREF in Bénin);
- b) support to the organization of local consultations and national meetings in each country, each year, for the implementation of the activities in each site;
- c) support to access to information (via internet for example) concerning the biosphere reserve and the other countries participating in the regional project;
- d) support to participation of key stakeholders (local community representatives; staff of the biosphere reserve; representatives of local and national environmental institutions, representatives of scientific community; representative of local and national NGOs) in the regional meetings and regional training courses on conflict resolution planned within the project;
- e) support to the creation of local and national structures (coordination committee, where it does not exist) for the participation of key stakeholders in discussions on the management plan and activities in each site.

The regional coordinating team will supervise the above activities, under the monitoring of UNESCO-MAB Secretariat and the Steering Committee of the regional project.

Annex 9 F.

Location Map of Dryland Biosphere Reserves



Annex 9 G.
List of MAB National Committee Contacts

BENIN:

National MAB contact: Dr B. Guedegbe
Comité national du MAB de Bénin
Centre béninois de la Recherche scientifique et technique
Ministère de l'Education Nationale
B.P. 03-1665
Cotonou
Bénin

Pendjari Biosphere Reserve:

Djaffarou Tiomoko
Direction des Parcs Nationaux et Réserves de Faune
Bénin

BURKINA FASO:

National MAB contact: Mr. Jean Noel PODA
Comité national du MAB burkinabé
IRBET/DGRST
B.P. 7047
Ougadougou
Burkina Faso

Mare aux Hippopotames Biosphere Reserve:

IRBET/DGRST
B.P. 7047
Ougadougou
Burkina Faso

COTE D'IVOIRE:

National MAB contact: Mme Martine Tahoux Touao
Comité national du MAB
08 BP 109
Abidjan 08
Côte d'Ivoire

Comoé Biosphere Reserve: Pierre Koffi

Chef d'Inspection
Conservateur du Parc National de la Comoé
Bouna
Côte d'Ivoire

MALI:

National MAB contact: M. Tamboura
Président Comité MAB Mali
Direction Nationale des Eaux et Forêts
B.P. 275
Bamako, Mali

Boucle du Baoulé Biosphere Reserve:

M. Baikoro Fofana
Directeur du projet
Opération Parc National de la Boucle du Baoulé
Testard
B.P. 275
Bamako, Mali

NIGER:

National MAB contact: Seyni Seydou
Président du Comité national du MAB Niger
Directeur de la Recherche et de la Technologie
Ministère de l'Enseignement Supérieur, de la Recherche et
de la Technologie
B.P. 628
Niamey, Niger

"W" Biosphere Reserve:

M. Amadou Seydou
Parc National du W du Niger
D.F.P.P. (Direction Faune, Pêche et Pisciculture)
B.P. 721
Niamey, Niger

SENEGAL:

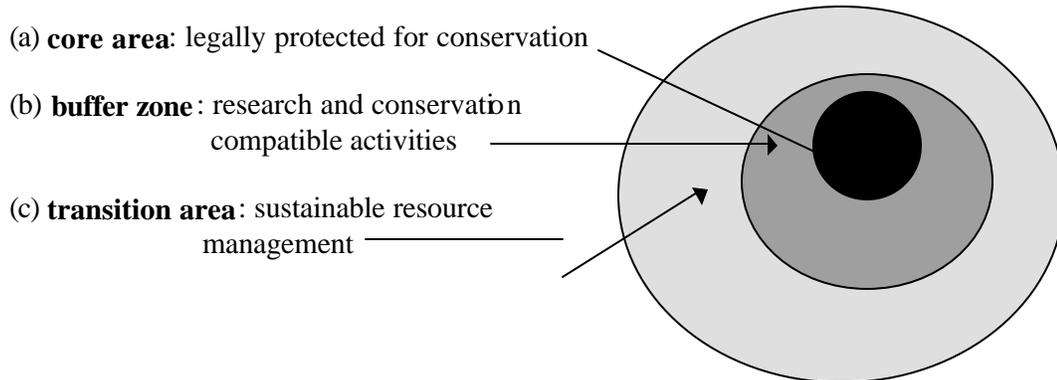
National MAB contact: M. Boubacar TRAORE
Coordonnateur national du Comité MAB du Sénégal
Délégation aux Affaires scientifiques et techniques
Ministère de la Modernisation de l'Etat et de la Technologie
23, rue Calmette
B.P. 218
Dakar, Senegal
Tel: (221) 825.83.49

Niokolo-Koba Biosphere Reserve: Jacques Rigoulot

Parc Conservateur
Parc National Niokolo-Koba
B.P. 37
Tambacounda, Senegal

Annex 9 H. Biosphere Reserve Schematic Zonation

Biosphere Reserves go beyond the classical protection concept and promote a wider spatial and conceptual approach. This approach includes a special zoning system: a legally protected central **core area** aims at conserving the world's major ecosystems where an only minimal human disturbance is allowed (e.g. for species inventorying and monitoring). The core area is surrounded by a **buffer zone** (or **management zone**) which helps to protect the core area and which can accommodate a greater degree of human use and experimental manipulation for scientific and development research. A **transition zone** (or **development zone**) surrounds the other two areas: here co-operation with local people and sustainable resource management practices are developed. It is the combined presence of conservation, research and development that characterise Biosphere Reserves.



Biosphere Reserves, initiated under UNESCO's intergovernmental "Programme on Man and the Biosphere (MAB)" in the early 1970s, form a network for international collaboration. As of June 2002, the total number of Biosphere Reserves is 408 in 94 countries. All Biosphere Reserves are nominated for international recognition in the international network by the government authorities of the country concerned. In doing so, countries commit themselves to cooperating with other countries in promoting the Biosphere Reserve objectives for learning and sharing of knowledge and experience. Hence, collectively, all Biosphere Reserves are linked with this common understanding of purpose within the Global Network of Biosphere Reserves. It is this co-operative dimension, at the intergovernmental level, co-ordinated by UNESCO, which makes the Biosphere Reserve network unique.

Annex 9 I.
Implementation Indicators of Seville Strategy for Biosphere reserve
(with cross reference to the Statutory Framework of the World Network of Biosphere Reserves)¹¹

Implementation Indicators	Cross Reference
INTERNATIONAL LEVEL	
Biosphere reserves included in implementation of the Convention on Biological Diversity	I.1.1
Improved biogeographical system developed	I.1.2
Guidelines developed and published	II.1.1; IV.1.4; IV.1.5
Network-wide research programmes implemented	III.1.1
Biosphere reserves incorporated into international research programmes	III.1.2
Regional and inter-regional research programmes developed	III.1.3
Interdisciplinary research tools developed	III.1.4
Clearing house for research tools and methodologies developed	III.1.5
Interactions developed with other research and education networks	III.1.6
Biosphere reserves incorporated into international monitoring programmes	III.2.1
Standardized protocols and methodologies adopted for data and for data exchange	III.2.2; IV.2.10
Mechanism developed for exchanging experiences and information between biosphere reserves	III.3.1
Biosphere reserve communication system implemented	III.3.2; IV.2.4; IV.2.7
International training opportunities and programmes developed	III.4.1
Demonstration biosphere reserves identified and publicized	IV.1.1
Guidance provided on elaboration and review of strategies and national action plans for biosphere reserves	IV.1.2
Mechanisms developed for information exchange among reserve managers	IV.1.3
Statutory Framework of the World Network of Biosphere Reserves are implemented at the international and national levels	IV.2.1;IV.2.2
Regional or thematic networks developed or strengthened	IV.2.4
Interactions developed between biosphere reserves and similar managed areas and organizations	IV.2.5
Information and promotional materials developed for the Biosphere Reserve Network	IV.2.7
Strategies developed for including biosphere reserves in bilateral and multilateral aid projects	IV.2.8
Strategies developed for mobilizing funds from businesses, NGOs and foundations	IV.2.9

¹¹ <http://www.unesco.org/mab/docs/statframe.htm>

Data standards and methodologies applied across the World Network	IV.2.10
NATIONAL LEVEL	
Biogeographical analysis prepared	I.1.3
Biosphere reserves included in national strategies and other responses to the Convention on Biological Diversity and other conventions	I.2.2; I.1.3
Links developed between biosphere reserves	I.2.4
In situ conservation plans for genetic resources in biosphere reserves	I.2.5
Biosphere reserves incorporated into sustainable development plans	II.1.2
Biosphere reserves developed or strengthened to include traditional life styles and in areas of critical people -environment interactions	1.3
Conservation and sustainable use activities identified and promoted	II.1.4
Effective management plans or policies in place at all reserves	II.2.1; IV.1.6
Mechanisms developed for identifying incompatibilities between conservation and sustainable use functions and to insure an appropriate balance between these functions	II.2.2
Biosphere reserves included in regional development and land-use planning projects	II.3.1
Land-use sectors near biosphere reserves are encouraged to adopt sustainable practices	II.3.2; IV.1.7
Biosphere reserves are integrated into national and regional research programmes which are linked to conservation and development policies	III.1.7
Biosphere reserves are integrated into national monitoring programmes and are linked to similar monitoring sites and networks	II.2.3
Principles of conservation and sustainable use, as practiced in biosphere reserves, integrated into school programmes	III.3.3
Biosphere reserves participate in international education networks and programmes	III.3.4
Model training programmes for biosphere reserve managers are developed	III.4.3
Mechanisms developed to review national strategies and action plans for biosphere reserves	IV.1.8
Mechanisms developed for information exchange among reserve managers	IV.1.9
Statutory Framework of the World Network of Biosphere Reserves are implemented at the national level	IV.2.12; IV.2.14
National-level mechanism developed to advise and coordinate biosphere reserves	IV.2.13
Interactions developed between biosphere reserves and similar managed areas and organizations with congruent goals	IV.2.15
Information and promotional materials developed for the Biosphere Reserve Network	IV.2.17
Strategies developed for including biosphere reserves in bilateral and multilateral aid projects	IV.2.18
Strategies developed for mobilizing funds from businesses, NGOs and foundations	IV.2.19
Mechanisms developed for monitoring and assessing the implementation of the Seville Strategy	IV.2.20

INDIVIDUAL RESERVE LEVEL

Survey made of stakeholders interests	II.1.5
Factors leading to environmental degradation and unsustainable use are identified	II.1.6
Survey made of the natural products and services of the biosphere reserve	II.1.7
Incentives identified for sustainable use by local populations	II.1.8
Mechanisms developed to manage, coordinate and integrate the reserves programs and activities	II.2.3; IV.1.10; IV.1.12
Local consultative framework implemented	II.2.4
Regional demonstration sites developed	II.3.3
Coordinated research and monitoring plan implemented	III.1.8; III.2.4
Functional data management system implemented	III.1.9; III.2.7
Reserve is used for developing and testing of monitoring methods	III.2.5
Reserve is used for developing indicators of sustainability relevant to local populations	III.2.5 ; II.2.6
Local stakeholders are included in education, training, research and monitoring programs	III.3.5; III.4.5
Information for visitors to the reserve developed	III.3.6
Ecology field centre developed at the reserve	III.3.7
Reserve is used for on-site training activities	III.4.4
A local educational and training programme is in place	III.4.6
Different zones of biosphere reserves identified and mapped	IV.1.10
Buffer and transitions reformulated to promote sustainable development and preserve the core area	IV.1.12
Local community involved in planning and managing reserve	IV.1.14
Private-sector initiatives to establish and maintain environmentally and socially sustainable activities are encouraged	IV.1.15
Information and promotional materials developed for the Biosphere Reserve Network	IV.2.21
Strategies developed for mobilizing funds from businesses, NGOs and foundations	IV.2.22
Mechanisms developed for monitoring and assessing the implementation of the Seville Strategy	IV.2.23

ANNEX 9J. Relationship of Regional Project to Ongoing Projects at the Biosphere Reserves Demonstrating Added-value of Regional Project and Linkage with NBSAPs of the Participating Countries

During the PDF B project planning phase contacts were established with the Project leaders in each country by the MAB National Committee's focal point in each country and during the national seminars, which were held in all the six countries at the start of the PDF B project planning phase. This was a concerted effort to avoid duplication and to facilitate communication and exchange with ongoing projects. The concerns and priorities of the project leaders involved in the ongoing projects within each Biosphere Reserve and the priorities expressed by the countries themselves stemmed from what the ongoing projects were not taking into account hence, the added value of the activities proposed within the regional project were validated. During the implementation of the full project, the same process will be developed in each country. National seminars will be organized on thematic components of the Regional Project and all other project officers from existing projects will be invited to participate to ensure that complementarity is maintained during project execution and value is added to ongoing initiatives. Project coordination at the biosphere reserve level and at the national level will be the responsibility of the MAB national Committee. The Committee will be charged with convening national consultations and information seminars with the resource persons and national institutions in charge of the ongoing projects and the proposed regional project.

At the regional level, the project will create a shared biodiversity information system and regional biodiversity expertise network. A strengthened and more effective AfriMAB network will improve cooperation in the management of West African savanna ecosystems and raise awareness of the importance of savanna ecosystems in the region. In addition, thematic collaboration will be sought at the regional level with the work of Conservation International and the Critical Ecosystem Partnership Fund (CEPF). CEPF is working in the Guinean Forest of West Africa and although there is no geographical overlap with the UNEP GEF project there may be opportunities for sharing lessons and cooperating on thematic issues such as conservation finance mechanisms for protected areas and on the strengthening of the role of universities in biodiversity conservation in West Africa. During the project appraisal phase formal mechanisms will be established to facilitate this cooperation.

The table that follows outlines the added value of the regional project to ongoing interventions.

Annex 9 J. Table One. Relationship of Regional Project to Ongoing Projects at the Biosphere Reserves and NBSAPs

Biosphere Reserve	Ongoing Projects	Added-value of Regional Project	Regional Project's Consistence with NBSAP
Pendjari	<p>Project GTZ-Pendjari This project concerns Pendjari National Park as well as two hunting zones (zone cynégétique de l'Atacora et de la Pendjari The Pendjari project has the following objectives: a) elaborate a management plan for Pendjari National Park and its adjacent hunting zones for conservation and sustainable use of resources; b) optimise the economic gains generated by protected areas (particularly through tourism) for the benefit of government, local populations and private sector. The programme will enable the building or rehabilitation of infrastructure within the Park (access roads, patrol roads, tourist trails, water points, information panels, offices and housing for park staff, information centre for visitors) and for logistic support (cars and maintenance equipment for the roads).</p> <p>“Community-based Conservation of Biodiversity in the Transborder Buffer Zones of the W, Arly and Pendjari National Parks” is a PDFB under preparation by UNDP GEF. This PDFB is implemented by IUCN Regional Office with which MAB National Committees are in contact as well as the MAB Secretariat. Co-operation will be established during the implementation of the project through Biosphere Reserve managers of the three parks involved and the MAB National Committee focal points.</p>	<p>Scientific research has been identified as an essential activity to complement conservation initiatives on-going in Pendjari BR. Research on conflictual relationships between the sites and local communities, including co-ordination aspects of the different stakeholders in the management of the biosphere reserve in an integrated matter.</p> <p>Training provided to the BR staff and local communities.</p> <p>The study of traditional practices of local hunters in collaboration with the GEF/UNDP project as well as the design of impact indicators on biodiversity will be a useful complement to the conservation activities being implemented by other partners. Training for the biosphere reserve staff and local communities in conflict management would also be of added value.</p> <p>The Pendjari Biosphere Reserve is presently studying the possibility of creating a trust fund for the Pendjari Biosphere Reserve. This study will be shared with and explored in the five other biosphere reserves.</p> <p>Use of common monitoring and interaction indicators for comparison of the sites and tested at the regional level and used in other MAB regional networks.</p> <p>Improved communication and information-sharing occurring between the six sites and the six MAB National committees.</p>	<p>Promoting research, local knowledge, training of local communities and regional co-operation are a strategic focus for the conservation of biodiversity as described in Benin National Biodiversity Plan and Strategy (p. 41, March 2002).</p>

Biosphere Reserve	Ongoing Projects	Added-value of Regional Project	Regional Project's Consistence with NBSAP
Mare aux Hippotames	<p>Mare aux Hippopotames receives support from a GEF/World Bank project entitled PAGEN (Partenariat pour l'Amélioration de la Gestion des Ecosystemes Naturels/Partnership for Natural Ecosystem Management Programme). This project focuses on protected areas for wildlife in Burkina Faso and aims to enhance the capacity of the forestry department and institutions to manage the sites and to improve local communities' capacities to conserve biodiversity in these protected areas. Mare aux Hippopotames Biosphere Reserve is located in the Hauts Bassin Conservation Unit and will thus benefit from project activities within the next five years. Mare aux Hippopotames Biosphere Reserve is an associated site to the ROSELT network, (Réseau d'Observatoire et de Surveillance Ecologique à Long Terme), a network for Long Term Ecological Monitoring managed by the OSS (Observatoire du Sahara et du Sahel). Burkina Faso also benefits from a World Bank project on "Sahel Integrated Lowland Ecosystem Management SILEM" which has identified livelihood strategies to combat land degradation and increase agricultural production.</p>	<p>Information gap at Mare aux Hippopotames Biosphere Reserve will be filled regarding scientific data on human and ecosystems relationships, indicators and baseline information for understanding impacts of local communities on biodiversity caused by resource use.</p> <p>Training for local communities and staff of the BR will be a complementary activity to on-going initiatives.</p> <p>Use of common monitoring and interaction indicators for comparison of the sites and tested at the regional level and used in other MAB regional networks.</p> <p>Improved communication and information-sharing occurring between the six sites and the six MAB National committees.</p>	<p>Objective 1 of Burkina Faso National Biodiversity Strategy Action Plan (December 1999) prioritises the involvement of local communities in the management of natural resources and the satisfaction of their needs and livelihoods (pp 46,47 and 67) as an essential condition for conserving biodiversity. The training of local communities is one condition to reach this main objective (p. 67). Enhancing institutional co-ordination for better management of the biosphere reserves is also a priority.</p>

Biosphere Reserve	Ongoing Projects	Added-value of Regional Project	Regional Project's Consistence with NBSAP
Comoe	<p>Since 1996, Côte d'Ivoire has received support from a WB/GEF project entitled GEPRENAF (Gestion Participative des Ressources Naturelles et de la Faune). This project is scheduled to terminate in 2003 and has activities in areas close to the biosphere reserve. A management plan has been elaborated by the WWF and the European Commission in 2001.</p>	<p>Support for research on impact of human uses on biodiversity, on co-ordination and institutional issues, in building indicators to better understand relationships between stakeholders and the ecosystems, and provide training for biosphere reserve staff and local communities.</p> <p>Use of common monitoring and interaction indicators for comparison of the sites and tested at the regional level and used in other MAB regional networks.</p> <p>Improved communication and information-sharing occurring between the six sites and the six MAB National committees.</p>	<p>The national biodiversity report of Côte d'Ivoire on Biodiversity (1999) mentions national parks such as Comoé as priority for in-situ conservation of biodiversity. This action plan is based on five main objectives, of which objectives 1, 2, 3 and 5 are particularly linked to the objectives of the present project: 1) increase knowledge about biodiversity where research and training should play an essential role; 2) reinforcement of measures for conserving biological diversity, including the preservation of national parks and biosphere reserves; 3) reduce pressure on biological diversity and 5) education and environmental awareness of local communities (pp. 237, 238, 239).</p>

Biosphere Reserve	Ongoing Projects	Added-value of Regional Project	Regional Project's Consistence with NBSAP
Boucle du Baoule	<p>The Boucle du Baoulé received support from UNESCO and UNDP for the establishment of an integrated management plan that was elaborated in 1998. UNDP is presently developing a MSP on the pastoralism issue in the biosphere reserve that will be complementary to the UNEP GEF Regional Project.</p>	<p>The Mali National MAB Committee held consultations and information was exchanged during the PDF B phase with the different projects intervening in the area. The present project will therefore focus on scientific surveys, particularly on building impact indicators, providing training on conflict management and exchanging experience with other biosphere reserves.</p> <p>Use of common monitoring and interaction indicators for comparison of the sites and tested at the regional level and used in other MAB regional networks.</p> <p>Improved communication and information-sharing occurring between the six sites and the six MAB National committees.</p>	<p>Training and research have been identified as main priorities for Mali Second National Report on Biodiversity Strategy and Action plan (p. 93, May 2001) as well as the protection of parks, including Boucle du Baoulé Biosphere Reserve (Interim report on Conservation of Biological Diversity March 1998, pp 10,11,12).</p>

Biosphere Reserve	Ongoing Projects	Added-value of Regional Project	Regional Project's Consistence with NBSAP
"W"	<p>"W" Niger Biosphere Reserve receives support from a regional project of the European Commission (ECOPAS) which focuses on Burkina Faso ("W" and Arly Parks) and Bénin ("W" Park) and Niger ("W" Biosphere Reserve). This project will support the building of roads in the park as well as infrastructures and materials for the Park staff. The three countries are planning a regional research programme and UNESCO-MAB as well as Niger MAB National Committee are members of the Scientific and Technical Committee of ECOPAS. In November 2002, the nomination of W Region transboundary Biosphere Reserve (Bénin, Burkina Faso and Niger) was approved by the MAB Bureau. This is the first transboundary Biosphere Reserve in Africa.</p>	<p>The Project will collaborate with the scientific research programme being designed in the "W" Niger Biosphere Reserve, and will particularly contribute to the building of long term interaction indicators on human uses. These indicators will be designed in order to be tested as well for the newly established transboundary biosphere reserve. Scientific support will be given to co-ordination and institutional issues for an integrated management of the Biosphere Reserve.</p> <p>Training for national scientists on interdisciplinary work will be a priority as well as training for local communities in conflict management, in collaboration with the Biosphere Reserve staff.</p> <p>Use of common monitoring and interaction indicators for comparison of the sites and tested at the regional level and used in other MAB regional networks.</p> <p>Improved communication and information-sharing occurring between the six sites and the six MAB National committees.</p>	<p>Niger National Biodiversity Strategy and Action plan highlights the building of a research programme as a priority for conservation of biodiversity as well as training of national stakeholders.</p>

Biosphere Reserve	Ongoing Projects	Added-value of Regional Project	Regional Project's Consistence with NBSAP
Niokolo Koba	<p>A management plan of Niokolo-Koba (completed in 2000) aims to resolve the conflicts with local communities concerning access to lands and resources. A co-ordination structure for the integrated management of the biosphere reserve is being planned. It is based on the National Biodiversity Strategic Plan elaborated in Senegal in 1998. Among the priorities are the delimitation of the boundaries of the biosphere reserve and their materialisation. Niokolo Koba Biosphere Reserve receives support from the European Commission for the next four years, through a regional programme entitled AGIR.</p> <p>A UNDP/ GEF project on “Integrated Ecosystem Management in Four Representative Landscapes of Senegal, Phase 1” is also underway for the next five years, with activities targeted on increasing livelihoods for certain villages in the transition zone.</p>	<p>Support will be mainly given to training of the Biosphere Reserve staff and local communities for conflict management. This is a crucial issue in Niokolo Koba Biosphere Reserve. At the scientific level, the building of indicators on human uses will be one main objective of the research component. The project will rely on the important scientific human resources existing in Senegal to undertake the scientific and applied research components of the Project</p> <p>Use of common monitoring and interaction indicators for comparison of the sites and tested at the regional level and used in other MAB regional networks.</p> <p>Improved communication and information-sharing occurring between the six sites and the six MAB National committees.</p>	<p>Biosphere reserves are mentioned as strategic tools for in-situ conservation of biodiversity in Senegal (Senegal National Report on Biodiversity, December 1997,p.42). Reinforcement of parks and reserves in Senegal as well as training of local and national institutions and communities involved in the management of natural resources and ecosystems are priorities for Senegal.</p>

Annex 9 K.
**Summary Strategy for Capacity Building at the Biosphere Reserve and
National and Regional Levels and Training Plan**

The project aims to build sustainable links, and connections between the various stakeholders involved in the management of the site by facilitating dialogue between the local communities and the managers, through sound and applied research taking into account their knowledge and needs concerning biodiversity, their livelihood options and future perspectives. The project aims to involve local communities and other key stakeholders in management discussions and negotiations, through detailed analysis of local structures and institutions for managing resources, through providing training in conflict prevention and resolution in each biosphere reserve and at the regional level, through interdisciplinary work and research, involving existing national research and environment institutions and the MAB National Committees.

The strategy at the biosphere reserve level will concentrate on three main categories of stakeholders, as decided in the Dakar technical regional meeting in February 2002:

- staff of each biosphere reserve
- local communities
- local and national scientists.

Training will be provided to the three main categories in the following thematic areas:

- For local communities: micro-enterprise; initiation to informatics; eco-tourism and conflict resolution and management.
- For BR staff: use of informatics tools for management purposes (GIS, GPS) ecotourism; conflict resolution and management, use of monitoring indicators.
- For local and national scientists: social sciences; resolution and conflict management; execution of applied field studies in the biosphere reserve.

A key to sustainable functioning of a biosphere reserve is the continued support of all stakeholders. This requires a coordination mechanism which involves credible and legitimate institutions and provide tangible benefits to local people. The project aims to support existing local and national institutions, to facilitate a permanent dialogue between the different stakeholders in each biosphere reserve by building on local existing rules, customs, institutions to manage the resources, access and control of resources in each biosphere reserve.

Study of the existing local institutional arrangements for stakeholder participation will be carried out during the project to evaluate the efficiency and sustainability of these institutions for the management of the biosphere reserve. Local communities, biosphere reserve staff and scientists were very keen to learn about experiences of the other countries. Therefore, one of the first benefits to them is to learn from each other, to have trained people who will stay on the site to assist them thereafter, and to implement a process for permanent and long term consultation and discussions.

The organization of training for conflict resolution in each site and at the regional level will also facilitate the identification of local and national mediators. In each biosphere reserve, individuals will be called upon for solving conflicts between groups of villagers or between the villagers and the staff of the biosphere reserve. The projects intend to identify these local

mediators, to train them and to use them as trainers in a second step of training others. This process will allow for legitimisation of local mediators in each biosphere reserve at the end of the project, who will be acknowledged by each country. One concrete output of the regional project will be a list of recognized mediators for each biosphere reserve who could also be called upon as experts for conflict resolution at the regional level.

MAB National committees will be charged with the dissemination of the information and experience at the national level and to raise the visibility of biosphere reserve to be used as demonstration site for sustainable use strategies and conservation of savanna ecosystems. MAB National committees will be charged with the production of support material for diffusing the data and information, including school materials for environmental awareness raising. The development of indicators and sound socio-economic applied research will be a contribution to the development of institutional capacity building. This will strengthen existing institutional structures for managing resources at the local level (local communities institutions, coordination and management structure in the biosphere reserve) and at the national level (support to MAB National Committees, establishment of official linkages between research and training institutions and biosphere reserves as demonstration sites).

Efforts will concentrate on increasing collaboration between the various institutions and agencies working in the field of environment and research in each country. The establishment of permanent and official links between national universities and the staff of the biosphere reserve will be explored. National PhD students and Masters students that will work in the biosphere reserve will be called upon as experts or consultants for scientific issues to be solved for management purposes and could contribute to the elaboration of management plans on a regular basis.

The project will serve to demonstrate and establish the role of biosphere reserves as field sites for monitoring, environmental education and scientific research at the national level. This will be achieved by initiating formal procedures between national scientific research and training institutions and the management authorities of the biosphere reserves and by strengthening local and national institutions for sustainably managing resources in the sites over a long term period.

At the regional level:

Regional training on conflict resolution and management will be designed to facilitate the exchange of experiences between the six countries and to learn about other methods for resolving conflicts. Exchange of BR staff and local communities representatives will be organised and joint publications will be issued.

PhD and Masters students will work on common thematic issues in several biosphere reserves for comparison and exchange of information. The six countries will use common interaction indicators for comparison of the sites that will be tested at the regional level and used in other MAB regional networks. The national scientific experts trained during the project will be available to share their expertise at the regional level on savanna ecosystems and biodiversity management issues.

The national mediators identified during the project will be used as experts in a regional roster and will be available for training and assistance in other biosphere reserves in the region.

The reinforcement of the human resources of the AfriMAB network will facilitate exchange of learning, skills and experience in similar ecosystems and structures similar as biosphere

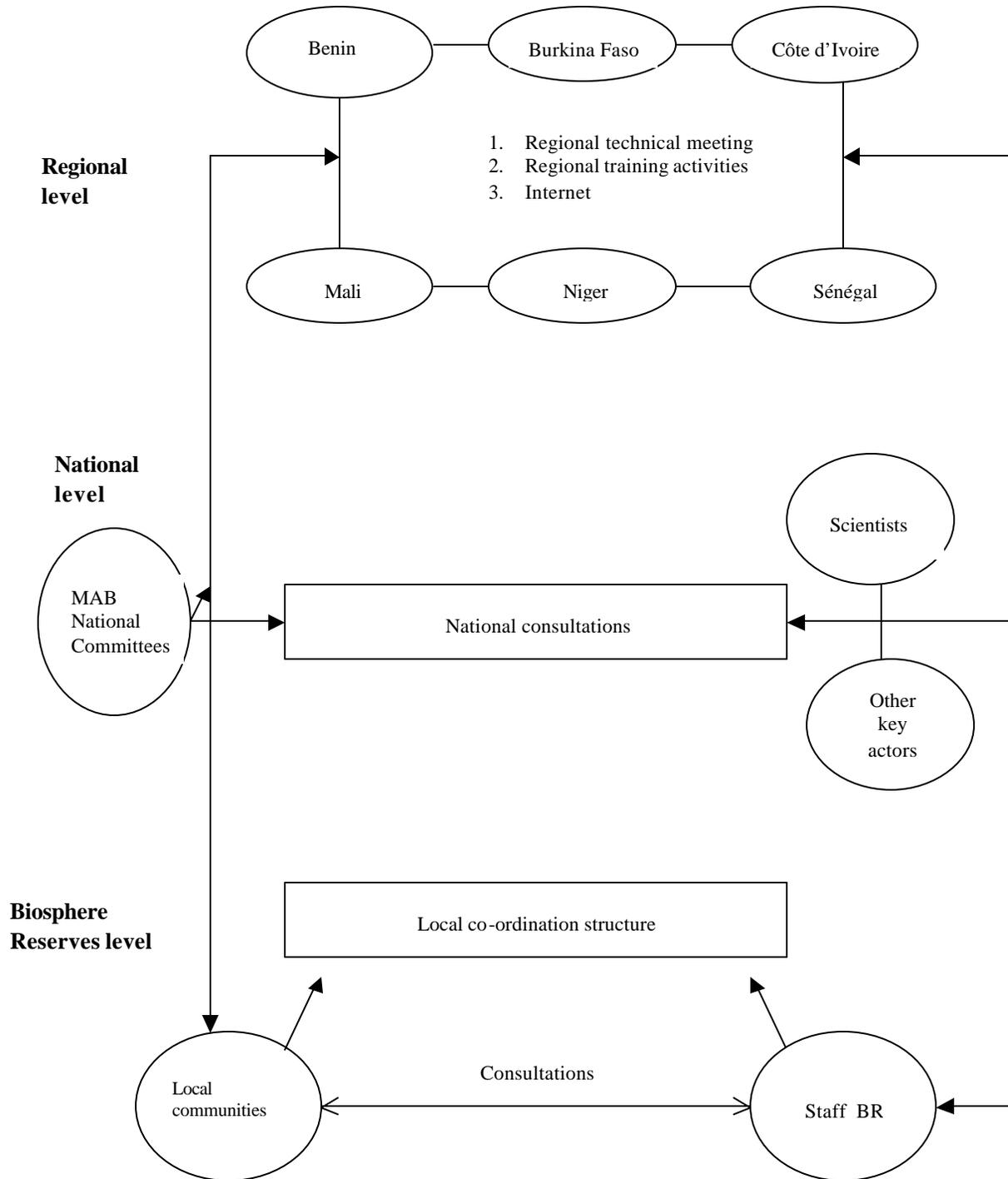
reserves and will improve communication and information-sharing occurring between the six sites and the six MAB national committees.

The institutions and individuals will communicate and exchange data sets and information within and outside the region. A strengthened and more effective AfriMAB network will improve cooperation in the management of West African savanna and raises awareness of the importance of savanna ecosystems in the region, and become more self-sustaining as a result.

The table on the next page summarizes the project training plan.

Training and Capacity Building Courses/Themes	Frequency/Extent	Beneficiary Group	Where Conducted
Enhancing capacity to access existing microcredit programs to create microenterprises, training in microenterprise development as appropriate for each BR (e.g., ecotourism, training of guides, development of ecovillages, handicraft production, etc.)	4 national training workshops = a total of 24 training workshops	Local communities	At each biosphere reserve
Application of GIS and database management in resource use planning	2 national training workshops per reserve for a total of 12 workshops 1 regional training workshop National workshops are intended to train staff of the six BR. A regional workshop will be convened for selected staff of all the six biosphere reserves to work on the development of a common database and common indicators for the long term.	Reserve managers	At each biosphere reserve
National PhD students will be members of the scientific team responsible for the implementation of Component One and will conduct their field surveys and research in the biosphere reserve	Ongoing throughout the project	University personnel	At each biosphere reserve
Education and awareness-raising programmes	2 national training workshops per reserve for a total of 12 training workshops	All biosphere reserve stakeholders, particularly local communities, Government ministries	At each biosphere reserve
Conflict management and mediation	3 regional training workshops and one national training workshop in each BR for a total of 9 training workshops National workshops will allow biosphere reserve stakeholders to work on specific biodiversity conflict issues in each site. Regional workshops will be attended by representatives of key stakeholder groups and will work on common tools and experiences for conflict resolution.	All biosphere reserve stakeholders, particularly local communities, Government ministries	At each biosphere and regionally
Multidisciplinary research and diagnosis and informatics	1 national training workshop in each reserve for a total of 6 training workshops 1 regional training workshop at project initiation National workshop will be attended by national and local scientists working in each biosphere reserve and thus will be specific in the terms of gaps to be fulfilled between natural and social sciences in each biosphere reserve and for the construction of interaction indicators. A regional workshop will convene the heads of each national scientific team to adopt common indicators and common research protocols at the beginning of the project.	Biosphere reserve staff and local communities at each biosphere reserve	At each biosphere reserve and regionally

ANNEX 9 L. Schematic Summary of Consultative Project Design Process



Annex 9 L. Supporting Documents Available in French

Benin

Renforcement des capacités techniques et de recherche scientifique pour une conservation durable de la biodiversité dans la réserve de biosphère de la Pendjari. Dr. Brice Sinsin. Avril 2002. 54 pages.

Projet de Renforcement des capacités techniques et de recherche scientifique pour une conservation durable de la biodiversité dans la réserve de biosphère de la Pendjari. Rapport du point focal du Comité national MAB. Dr. Bonaventure Guedegbe. Avril 2002. 26 pages.

Burkina Faso

Le programme de l'UNESCO sur l'Homme et la Biosphère (MAB) a 30 ans : quelle est la situation et les perspectives au Burkina Faso. Comité national MAB Burkina Faso. Septembre 2001. 36 pages.

Rapport technique de mise en œuvre du projet sur le Renforcement des capacités techniques et de recherche scientifique pour une conservation durable de la biodiversité dans la réserve de biosphère de la Mare aux Hippopotames. Conservateur de la Mare aux Hippopotames. Août 2002. 15 pages.

Projet Régional sur le Renforcement des capacités scientifiques et techniques pour une gestion effective et une utilisation durable de la diversité biologique dans les réserves de biosphère des zones arides d'Afrique de l'Ouest. Cas de la Réserve de la Biosphère de la Mare aux Hippopotames au Burkina Faso. Dr. Mamounata Belem. Mars 2002. 129 pages.

Côte d'Ivoire

Projet Régional sur le Renforcement des capacités scientifiques et techniques pour une gestion effective et une utilisation durable de la diversité biologique dans les réserves de biosphère des zones arides d'Afrique de l'Ouest. Cas de la Réserve de la Biosphère de la Comoé. Professeur ASSA Ayémou. Mars 2002. 157 pages.

Mali

Projet Régional sur le Renforcement des capacités scientifiques et techniques pour une gestion effective et une utilisation durable de la diversité biologique dans les réserves de biosphère des zones arides d'Afrique de l'Ouest. Cas de la Réserve de la Biosphère de la boucle du Baoulé. Dr. Malick Sylla. Mars 2002. 98 pages.

Niger

Projet Régional sur le Renforcement des capacités scientifiques et techniques pour une gestion effective et une utilisation durable de la diversité biologique dans les réserves de biosphère des zones arides d'Afrique de l'Ouest. Cas de la Réserve de la Biosphère du « W ». Prof. Ambouta Karimou. Mars 2002. 59 pages.

Senegal

Projet Régional sur le Renforcement des capacités scientifiques et techniques pour une gestion effective et une utilisation durable de la diversité biologique dans les réserves de biosphère des zones arides d'Afrique de l'Ouest. Cas de la Réserve de la Biosphère du Niokolo Koba. Prof. Paul Ndiaye, Jacques Rigoulot, Boubacar Traoré, Comité national MAB Sénégal. Mars 2002. 48 pages.

Plan de gestion du parc et de sa périphérie. Parc National du Niokolo Koba. Ministère de l'Environnement/Direction des Parcs Nationaux. Octobre 2000. 219 pages.

Regional

Rapport final de la première réunion du comité international de supervision, phase PDF-B du projet. UNESCO-Paris, 11-12 septembre 2001. 11 pages.

Rapport final de la seconde réunion du comité international de supervision, phase PDF-B du projet. UNESCO-Paris, 24-25 avril 2002. 13 pages.

Rapport final atelier technique de Dakar, Bureau régional de l'UNESCO-Dakar, 11-15 février 2002. 16 pages + Annexes.

Projet Régional sur le renforcement des capacités scientifiques et techniques pour une gestion effective et une utilisation durable de la diversité biologique dans les réserves de biosphère des zones arides d'Afrique de l'Ouest. Proposition de programme de recherche scientifique pour les quatre années du projet global (2003-2006) pour les six sites concernés par le projet. Prof. Jacques Weber. Octobre 2002. 17 pages.

Annex 10. Cofinancing Summary Table and Cofinancing Letters (Separate PDF Attachment)

Annex 11. Response to GEF Council Member Comments

Switzerland Comments

Main concerns:

1. Sustainability: doubts remain whether the benefits of the projects will be sustainable without support beyond the project duration. The biosphere reserves will need long-term support in order that the biodiversity can be conserved and that the reserves can resist pressure from outside the parks. The project document does mention that the design and implementation of local resource strategies are part of the activities. It also mentions the securing of financial support from other funding sources including establishment of trust funds. However this crucial aspect of securing future funding is not given enough importance (for instance the logframe does not mention activities aimed at establishment of trust funds.)
2. Role of local communities and local stakeholders: Although the document places importance on awareness raising and coordination between local communities and reserve managers, the bulk of the activities is directed towards improving the capacities of managers and scientists, not towards empowerment, and enhancing local management capabilities and knowledge. In this respect, the proposed activities could be improved by adding activities aimed at furthering social learning processes and community building.

UNEP Response

1. We agree that assuring post-project sustainability will be a challenge for the project, as it is with all projects that seek to secure long-term conservation and management effectiveness of Protected Areas. The option for establishing a Trust fund to support each biosphere reserve, as is currently being explored by Pendjari Biosphere Reserve, has been included in the logical framework specifying that a thorough survey will be conducted on the feasibility of establishing a trust fund (as well as evaluating the potential for other conservation finance options) for each biosphere reserve, in addition to the economic and financial activities already planned in the project. MAB National Committees will be responsible for securing financial support from other sources with technical support from the Project Management Unit, and a conservation finance strategy will be developed by the end of the second year of the project for each biosphere reserve. These outputs and the accompanying outcomes have been included in the logframe, the M&E Plan, and the project work plan.
2. Active participation and ownership of the project by local communities is critical to the success of the project. A number of activities in components One and Two deal directly with improving the livelihoods of local communities and increasing their participation in decision making in biosphere reserve management. This includes the study of local economies and of the dependency of local communities vis à vis the biosphere reserve, the substantiation of local knowledge on biodiversity and inclusion of this knowledge in the planning and management of the biosphere reserve, and surveys on local rules and practices of access and use of resources. In addition, in component Three, specific training for local communities is planned and has been identified by the local communities themselves as a priority need.