GUINEA
Coastal Marine and Biodiversity Management

GEF Project Brief

Africa Regional Office
AFTS4

Date: February 9, 2004
Sector Manager: Mary A. Barton-Dock
Country Director: Mamadou Dia
Project ID: P070878
Focal Area: B - Biodiversity

Team Leader: Dirk Nicolaas Prevoo
Sector(s): General agriculture, fishing and forestry sector (100%)
Theme(s): Environmental policies and institutions (P), Biodiversity (P), Other environment and natural resources management (S)

Project Financing Data

[ ] Loan [X] Credit [ ] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Total Project Cost (US$m): $18.05 **Cofinancing:** To be determined
Total Bank Financing (US$m):
Has there been a discussion of the IBRD financial product menu with the borrower? ☐ **Yes** ☐ **No**

Proposed Terms (IDA): Standard Credit
Commitment fee: 0.00-0.50%

Financing Plan (US$m): Source	Local	Foreign	Total
BORROWER	1.00	0.00	1.00
LOCAL COMMUNITIES	0.55	0.00	0.55
GLOBAL ENVIRONMENT - ASSOCIATED IDA FUND	4.00	3.00	7.00
GLOBAL ENVIRONMENT FACILITY	4.00	1.00	5.00
FOREIGN MULTILATERAL INSTITUTIONS (UNIDENTIFIED)	2.50	2.00	4.50
Total:	12.05	6.00	18.05

Borrower/Recipient: REPUBLIC OF GUINEA
Responsible agency: MINISTRY OF PLANNING
Ministère du Plan
Contact Person: Mohamed Sidi Sano
Tel: (224) 29 62 66 Fax: Email: sidisano@yahoo.fr
Other Agency(ies):
Programme d'appui aux communautés villageoises
Contact Person: Mme. Camara Aminatou Barry
Tel: (224) 46 40 23 Fax: (224) 46 40 31 Email: pacv@afribone.net.gn and abcamara.cnc@pacv.gov.gn
Centre National des Sciences Halieutiques - Boussoura
Contact Person: M. Alkaly Doumbouya
Tel: (224) 22 96 98 Fax: Email: adoumbouya@cnshb.org.gn

Project implementation period: FY2005-2009

A. Project Development Objective

1. Project development objective: (see Annex 1)

The project's overall *development objective* is to promote rational management of Guinea's coastal biodiversity for both conservation and sustainable development ends, with a particular emphasis on assisting communities in and around these priority areas to plan, implement and maintain environmentally sustainable and socially inclusive alternative livelihoods options.

The project's *global environmental objective* is to strengthen the conservation of globally and nationally significant habitats and species in Guinea's Coastal Zone. The project will work with national and regional partners to promote and implement an integrated approach to the conservation and sustainable use of globally important biological resources in Guinea's coastal zone.

The project's development and global environmental objectives should be viewed within the context of a longer term (*eight year*) effort that: (a) assists Government in developing a comprehensive vision for Guinea's coastal zone; (b) develops and establishes a network of protected areas incorporating coastal zone Ramsar sites of high global importance in support of Government's biodiversity protection strategy and international commitments; and (c) identifies and implements with communities in the coastal zone selected strategic activities that would strengthen sustainable use of the resources contained within these sites and in bufferzones. This would contribute to the formulation and implementation of sustainable strategies for coastal zone management and provide protection to selected sites of global and national importance in the coastal zone.

The specific four year project development objectives would be to elaborate in collaboration with Government and other stakeholders a multi-sectoral sustainable development strategy for the coastal zone, which mainstreams biodiversity conservation, establish a donor coordination mechanism for interventions in the coastal zone, establish at least one protected area in close consultation and collaboration with affected communities, and provide support to the population of about 10-20 Rural Development Communities (*Communautés ruraux de développement*, CRD) living within and around these areas (about half of all coastal zone CRDs) in order to establish a coherent zone that covers the different ecological zones (coastal plateau, saltwater marshes and part of the continental sea shelf - see Section 2) and maximizes synergies between the different activities. The project will be implemented in close collaboration with the second phase of the IDA supported Village Communities Support Program (*Programme d'Appui aux Communautés Villageois*, PACV), which focuses on local capacity building for development activities and poverty alleviation geared micro-projects implemented by project beneficiaries, and other donor funded national and regional activities.

2. Key performance indicators: (see Annex 1)

The performance of the project will be assessed through the following performance and output indicators (detailed in Annex 1):

Enabling Policy and Institutional Environment:

- Strategy for the phased establishment of a protected area in place by end of project year 2.
- Establishment of a formalized donor and other stakeholders' coordination mechanism (forum) led by Government for the coastal zone by the end of project year 2.
- Design of an environmentally sustainable multi-sectoral development strategy for the coastal zone by project year 4.

Biodiversity Conservation:

- At least one protected area formally designated by government in year 4 (Expanding PA system by approximately 85,000 ha).
- At least one additional site analyzed and all preparatory work completed for the creation of a second protected area (approximately 95,000 ha).
- Stabilization of natural resource base in 50,000 ha of areas under cultivation in project watershed target sites by end of project.
- Annual transboundary discussion of work programs for coherent national coastal zone protected areas management.
- Monitoring system and methodology measuring ecological and socio-economic parameters (e.g. definition of baseline for key indicator species, water quality and land area) for project intervention areas defined and implemented within six months of effectiveness.
- Successful development, testing and adaptation of an operational toolbox to set-up community-managed protected areas in the coastal zone by end of project year 3.
- Effective participation of communities living around the protected area in its management, through the establishment of a stakeholder management committee, by the end of the project period. Assessment of this effectiveness will be done through the WWF/World Bank Alliance site level management effectiveness tracking tool.

Sustainable Use:

- 40% of participating communities implement adapted natural resource use activities as identified in local development plans (PDL) and annual investment plans (PAI) supported by the project by year 2 (75% by year 4).
- 60% of project CRDs integrated and prioritized improved natural resource management activities in their local development plans by year 2 (75% by year 4).
- Proof of involvement of relevant producer associations (fishermen, farmers, livestock holders, hunters) in development and implementation of local development plans.
- Role and responsibilities of all stakeholders in direct project intervention sites are clarified and resource exploitation rules are prepared and agreed upon by the end of the project.

Outcome Indicators

- Formal establishment of a coastal zone protected area.
- Satisfactory functioning of donor coordinating mechanism.
- Formal adoption of multi-sectoral development strategy, incorporating biodiversity conservation as a key element, for the Guinea Coastal Zone region by Government.
- End of project impact survey shows a positive trend.
- 75% of participating communities implement adapted natural resource use activities as identified in local development plans (PDL) and annual investment plans (PAI) supported by the project.
- 75% of project CRDs integrated and prioritized improved natural resource management activities in their local development plans.

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project: (see Annex 1)
Document number: 25925 **Date of latest CAS discussion:** July 2, 2003

The CAS focus is on poverty reduction by increasing productivity of especially rural populations. In addition, the CAS specifically recognized the negative impact from demographic pressures, poor

agricultural practices, mining activities, and influxes of refugees on the natural resource base through widespread deforestation, hunting and destruction of watersheds through surface mining. Degradation of these resources in turn is leading to declines in soil fertility and consequently to falls in agricultural productivity and losses in biodiversity. The project seeks to stem the poverty induced mining of natural resources which are leading to increased and reduced productive capacity in the medium to longer term. The project is specifically mentioned in the CAS.

1a. Global Operational strategy/Program objective addressed by the project:

Guinea ratified the Convention on Biological Diversity on May 7, 1993. The proposed program fits well with the GEF Biodiversity Operational Strategy and supports the objectives set out in the Operational Program on Coastal, Marine and Freshwater Ecosystems (OP 2). It is in line with guidance from the first, second and third Conference of the Parties to the Convention on Biological Diversity, which stresses in situ conservation of coastal and marine ecosystems. It specifically responds to the Jakarta Mandate endorsed at COP2, by supporting conservation and sustainable use of vulnerable marine habitats and species. The conservation and sustainable use of coastal and marine ecosystems have been identified as priorities within the national biodiversity strategy and action plan. The proposed program recognizes the importance of conserving ecosystem structures and functions in order to maintain, increase and diversify ecological services of global, national and local benefit. This integrated approach to the management of coastal ecosystems represents a strategy that promotes conservation and sustainable use of natural resources in an equitable way.

The project responds to COP guidance in various ways including:

- taking an ecosystem approach to conservation;
- involving local communities and resource users, including building on local knowledge,
- strengthening community management for sustainable use and promoting economic incentives such as alternative livelihood opportunities;
- strengthening local and national institutional capacity to address environmental issues, especially through developing a sustainable institutional and legal framework for promoting biodiversity conservation and management, and favoring participatory models that devolve biodiversity decision-making and management to stakeholders at the local level;
- linkages with other countries in the sub-region will be actively pursues, especially with Guinea-Bissau and Senegal; and
- strengthening inter-institutional, and multiple stakeholder forums such as the national-level Biodiversity Committee, Discussion and Implementation fora in pilot areas, and fisheries committees so as to promote the integration of biodiversity into fisheries policies and decisions

The proposed project seeks to design and test approaches that integrate biodiversity conservation and sustainable use concerns with poverty alleviation and socio-economic development. If successful, the models developed and piloted would be replicated elsewhere along the Coastal region.

Furthermore, the project is consistent with the strategic priorities for biodiversity and capacity building under GEF-3. In particular, this project fits well under Pillars I and II of the biodiversity strategic priorities. The project will support Guinea with the creation of its first protected area in its coastal zone which would incorporate two Ramsar-designated wetlands of high global and national biodiversity value and which would become part of a wider network of protected areas. In particular, the project will seek early coordination with institutions (supported by a World Bank/GEF funded project and an EU supported project) involved in similar efforts in Guinea-Bissau to create a larger transboundary protected area. The result will be a substantial contribution to a global increase of coastal and marine areas under improved

management for conservation and an increase of productive landscapes that support globally significant habitats and ecosystems around these protected areas. Targeted capacity building for developing and implementing a framework for integrated coastal zone management, for the creation of protected areas and environmental ground-work with local change agents and communities is at the center of the project's approach. In addition, the project will mainstream environmentally sustainable coastal land use planning at all levels (communities, and local and national government).

Finally, the project responds to the following two targets adopted for Oceans, Coasts and Islands at the World Summit on Sustainable Development (WSSD) in Johannesburg 2002:

Conservation of biodiversity:

- develop and facilitate the use of diverse approaches and tools, and
- the establishment of protected areas consistent with international law and based on scientific information, including representative networks by 2012.

The proposed project thus reflects national, sub-regional and international priorities for coastal and marine management as well as for biodiversity conservation.

2. Main sector issues and Government strategy:

Background on country's general characteristics:

Located on the southwestern coast of West Africa, the Republic of Guinea has a total area of 245,857 km². Its geographic coordinates, lying between 7°05 and 12°51 latitude North and 7°30 and 15°10 longitude West, place it about midway between the Equator and the Tropic of Cancer. The country consists of four main natural regions (Guinée Maritime, Fouta Djallon, Plateau Mandingue and Guinée Forestière), which differ in their topography, climate, soils and majority ethnic group. Administratively, the country has 7 administrative regions (Boké, Kindia, Mamou, Labé, Faranah, Kankan, N'Zérékoré) plus Conakry; and 33 prefectures and 5 urban communes. Prefectures are sub-divided into several sub-prefectures, which correspond to a CRD.

Guinea's hydrological network is dense: several large rivers originate in the sub-region (e.g., the Bafing, the Gambia and the Niger). The climate is tropical, with two seasons (dry and rainy), and is characterized by great regional variations (rainfall ranges from 1,200 to 4,000 mm/year). Guinea possesses a range of natural resources. With one third of the world's bauxite, large reserves of iron, diamonds, gold, uranium, , and limestone, etc., in addition to an immense hydroelectric potential that is only beginning to be tapped, the country has great promise in terms of its economic and social development prospects.

With a total estimated population of 8.2 million and per capita GDI of around US$450, Guinea was ranked 161st (out of 174) in the 2000 World Bank Atlas ratings. Over 50% of the population is under the age of 15 and annual population growth is thought to be 2.6%. By 2015, it is estimated that Guinea will have 10.5 million inhabitants (source: UNDP). The economy relies on agriculture and commercial mining. Eighty percent of the population relies on agriculture for their livelihood while the sector accounts for 11.2% of GDP. Mining brings in 80% of the country's export income, 24.7% of its tax revenues and accounts for 17% of GDP. Investments in social sectors have remained low but trend shows sign of improvement. A high proportion of population is rural and exploits natural resources. This growing exploitation imposes considerable pressures which reduces forest, soil, fishing and mining resources, causing serious environmental degradation as a result of deforestation, soil erosion, and resulting in a deterioration of quality of live and increasing poverty**.**

The Guinean Coastal Zone

Guinea's coastal zone possesses a biological diversity of significant importance to the global environment. Indeed, the three coastal ecosystems described below are rich in terrestrial and marine species, which, in other parts of the world, have led to the establishment of world heritage sites.

The Guinean coastal zone is defined here as the geographic area consisting of: (i) the **coastal plateau,** made up of the various watersheds feeding the numerous watercourses that flow into the Atlantic ocean**;** (ii) the vast **saltwater marsh** spanning nearly 300 km of coastline; and (iii) the **continental sea shelf,** which is the main constituent of the maritime zone.

The coastal plateau ranges in width from 20 to 80 km. It abuts the foothills of the Fouta Djallon and carries most of the region's road and urban infrastructures. It is covered with highly degraded, lateritic, sandy and relatively infertile soils used for slash-and-burn agriculture (e.g., cultivation of rice, groundnut and fonio), and for crops requiring few nutrients (such as oil palms).

The saltwater marsh covers nearly 385,000 ha. The marshes can be divided into 3 landscape types: the upper estuarine plains, the oceanfront plains, and the central estuarine plains, and is the site of intensive wood cutting, rice cultivation, salt gathering, fishing, fish smoking, etc. It consists of a sedimentary substrate of brackish alluvium on which mangroves have developed. The Guinean mangrove zone is part of the vast mangrove area stretching from Senegal to northern Angola. It represents one quarter of West Africa's total mangrove wetland and consist essentially of mangrove trees of various strains (e.g., *Avicenia germinans, Rhizophora mangle, harisonii* or *mucronata, Lacuncularia racemosa*, etc.). Some forest stands of *Rhizophora* still exist (in the Benty area) and there are significant stands in the Bay of Sangaréah and the area of Kafarandé). A single-species stand of old *Avicenias*, unique in Guinea, spans over 1,000 ha on the south side of the Monchon plain. The mangroves ecological function is closely intertwined with that of the upstream (coastal plateau) and downstream (continental sea shelf) ecosystems. Guinea's mangrove environment consists of an underwater sedimentary substrate covered with salt-tolerant vegetation. It is crisscrossed with numerous watercourses due to the extraordinary volume of the various watersheds feeding it. The large size of the continental sea shelf (in terms of its length and gentle slope) explains the exceptional tidal variations (3.5 to 7 meters) and the absence of swell along the coast (which thus allows the mangrove swamps to develop). The mangrove stands presently cover about 200,000 ha. Another 140,000 ha of the saltwater marshes have been used as rice paddies at one time or another, of which 78,000 ha are thought to be still under cultivation, with the rest having been abandoned (due mainly to acidification).

The continental sea shelf is exceptionally large (extending 160 km off the coast where Guinea borders Guinea-Bissau). This formation, which is extremely rich in organic material, contains most of the fisheries resources of Guinea's ZEE (Zone Economique Exclusive). It does not experience much deep sea upwelling, and nearly all of its replenishment comes from the nutrient-rich waters of the coastal plateau and mangrove area. Artisanal and industrial fishing activities have become increasingly intensive.

Coastal erosion is mainly caused by natural processes. This phenomenon can be correlated with the severity of winds and, thus, with the resulting ocean swells and rainfall. During periods of high winds, and therefore of low rainfall and strong swells, the oceanfront mangrove marsh retreats, channels and estuaries silt up, salinity increases and cultivable area shrinks. On the other hand, under conditions of gentle wind, high rain and weak swells, the mangrove advances, soils become less saline and cultivated areas can expand. This irregular interannual phenomenon has been termed the "breathing" of the mangrove swamp). The coastline is thus in perpetual flux, with transversal variations that, over time, balance each other out along the coastline as a whole.

The (geographic) separation into single ecological entities as described above does not sufficiently reflect the complexity and interaction between these entities. Indeed, in terms of their fertility, the three ecosystems are highly interdependent. Sediments and water flows are at the core of these exchanges. The coastal plateau supplies the sediments and organic matter that are the basic mechanisms for renewing the fertility of the two upstream systems. By means of its flushing effect, it also rinses and desalts the estuaries and enriches the marine environment. The saltwater marsh stabilizes the sediment layer (with the help of the mangrove trees) and regulates inflow from the ocean. The continental sea shelf, through its tidal effects, helps restore the fertility of the various salt marsh plains and is itself enriched with alluvium when the flushing phenomenon takes place. The interdependence of the three coastal ecosystems is all the more evident since they co-exist in a relatively limited and heavily populated area. Any change in one involves consequences for the other two. The disappearance of the mangrove swamp would eventually result in a sharp reduction in fish stocks and in great losses of surface area and fertility in the usable plains of the saltwater marsh.

Two other important sites in terms of habitat conservation are the following:

- Remnants of **mesophilic forests** that still have some large specimens of slow growing tree species (e.g., *Chlorophora excelsa* (Iroko), *Terminalia ivorensis* (Framiré), *Afzelia africana* (Lingué), etc.). These are found particularly on the island of Benty or in the classified sites of Forécariah (e.g., the Kameleya forest).

- The few **dry forests** which contain tree species that are becoming increasingly rare (*Bombax costatum* (or kapok tree), *Combretum micranthum* (kenkiliba), *Cola acuminata* (cola nut tree, etc.). They are home to a rich and often endangered fauna (e.g., chimpanzees, antelopes and even lions in the northern part of Kafarande).

(i) Sector issue 1: Role of Guinea's coastal and marine resource base including global biodiversity significance and its threats

Guinea's coastal complex hosts exceptional biodiversity, due to its remarkable landscape features. It is characterized by an extensive interpenetration of terrestrial and aquatic environments, including vast estuaries, a large archipelago rising from a continental shelf, and seasonally flooded coastal plains. The Guinea Current stretches along the Atlantic African coast from about Guinea Bissau to Angola. It is ranked among the world richest coastal and off-shore reserves in terms of fishery resources, oil and gas, precious minerals, its potential for eco-tourism and its functioning as important reservoir of marine and coastal biodiversity of global significance. The particularity of the Guinea portion lies in the fact that it contains the widest part of the continental shelf of the Guinea Current, reaching 160 km at the north-western border with Guinea Bissau. This part of the coastal zone barely experiences any ""upwelling"" from deeper waters. Upwelling, usually drains sediment and nutrients that are brought in from the upstream inland waters to the coast towards the open sea. Hence, without much upwelling the coastal waters accumulate much more nutrients and therefore become very productive. The main biotopes found in the coastal zone, include mangroves, sandbanks and mudflats, shallow estuarine waters and sub-humid Guinean forests. Practically the entire coastal zone has been identified as priority area for biodiversity conservation, as part of what is left of the Upper Guineas Forest. Remaining patches of this forest are found along the West African coast from Guinea to Togo.

Guinea's total area of mangroves constitutes one quarter of West Africa's total mangrove wetland –stretching from Senegal to northern Angola- the ecological function of which is closely intertwined with that of the upstream (e.g., coastal plateau) and down stream (continental sea shelf) ecosystems. The

extreme irregularity of the mangrove dominated shoreline, harbors a multitude of niches along the land-water interface. These habitats, particularly the marine and estuarine waters, are known to be among the richest on the West African coast in terms of diversity, productivity and food potential. They are essential for the survival of several species (e.g., migrating birds) that are globally endangered or threatened, and for species that are economically important (fish and game).

Ecosystem Diversity:
Coral Reefs: There are no true reefs along the West African coast or in the archipelagos of the Gulf of Guinea, due to the cool waters of the Benguela Current and the Canary Current.
Mangroves: Despite the lower diversity than in other areas (only six species of mangroves), the West African coast has the best developed and most extensive mangroves in Africa. The most extensive areas are in Guinea and Guinea-Bissau, both of which were formerly almost entirely fringed with mangroves; although much has been cleared they still have some 200,000 hectares and 100,000 hectares respectively. Mangroves are a very important feature of the zone despite extensive logging activities. Despite the importance of this region for mangroves, relatively few are protected in West Africa and there is currently no strategy for the protection of the six classified Ramsar sites along Guinea's coastal zone in place.

Species Diversity:
In comparison with the shores of East Africa and the western Atlantic, the tropical Atlantic coast of Africa has an impoverished biota. At the same time, there are relatively high levels of endemism in many groups. The marine resources play an important role in the local, national and regional economies. The west coast has an estimated 239 species of reef fish, of which over 70 % are endemic. The Gulf of Guinea islands probably have a particularly high level of endemism with the shore fish. The mainland coast is visited seasonally by millions of migratory birds (especially waders).

Threats (see threats and root causes analysis in annex 10):
The various ecosystems of the countries have not been well studied (besides the mangrove habitats) and biodiversity is poorly documented. This might explain why the conservation and protection of Guinea's natural coastal resources has not yet adequately received support by the international community. Potential links between biodiversity conservation and rural development have not been established in national sectoral policies and strategies. In the meantime, local (increasing) population continues to exploit unsustainably Guinea's coastal and marine resources. This threat has been exacerbated over the past decade by the enormous influx of refugees along Guinea's borders with Sierra Leone and Liberia, as well as by the persistence of poverty and lack of alternative sources of income among the rural population.

Aside from the worrisome reduction in the volume of flora and fauna, the equilibrium of the three ecosystems described above is at risk and results in the destruction of globally important habitats (e.g. nesting and reproduction sites in particular for birds and fisheries stocks). The impact of these unsustainable exploitations has only been partially assessed: Studies carried out by the CNSHB and IRD on Guinean fisheries stocks indicate a reduction of stocks to one-fifth of their former levels over the past ten years. This dramatic drop is partly due to disorganized exploitation. Time series data for the same period also show a significant reduction in plant cover in the area. Erosion, reduced soil fertility and the impacts on downstream ecosystems are intensifying. Studies performed by the National Directorate for Water and Forestry (*Direction Nationale des Eaux et Forêts*, DNEF) indicate a reduction in areas traditionally rich in wild game, an abandonment of the practice of hunting in certain localities due to a lack of game, and a reduction, or even disappearance, of some wild species.

The underlying multiple and inter-related root causes for these threats are cutting across sectors and can be summarized by the following categories (not in order of priority):

National context:

- Elevated poverty level
- Increased population pressures
- Increased urbanization, especially in coastal zone
- Weak legislative, policy, institutional and financial framework

Resource uses:

- Extensive cropping systems
- Extensive mining systems, focusing on surface mining
- Uncontrolled wood collection
- Extensive livestock systems
- Increased water pollution from poorly planned economic development activities
- Uncontrolled harvesting of native plant species
- Uncontrolled fishing
- Uncontrolled hunting

(ii) Sector issue 2: Socio-economic context and anthropogenic pressures of Guinea's coastal zone

Guinea's economy is almost entirely dependent on natural resources for livelihood and labor. Mineral mining and agriculture represent the most important economic activities, providing employment to about 80% of total population. Agriculture is the dominant activity of the rural population while 30% of the rural population is practicing livestock holding. The importance of fishing is reflected in its contribution to the national diet (40% of animal proteins are provided by fish consumption). Household energy depends for 99% on wood fuels, and the healthcare system depends for 80% on traditional medicine practices, which rely on the availability of flora and fauna species.

Studies of coastal population trends over time indicate a spectacular increase of 292% between 1963 and 1996. This population explosion is due to the fact that the coast is traditionally a resource-rich area (agro-pastoralism, minerals, fish) and that this is where most of the cities are located, including the capital, Conakry. Nationwide, 40% of the population live on 15% of the territory, which leads to a high degree of exploitation of the surrounding ecosystems. The phenomenon of immigration is accelerating. Within 15 years, population density will have doubled.

In sum, the extraordinary richness of this environment and its unusual continental shelf are being exploited more and more intensively by an impoverished population that often pursues a short-term strategy vis-à-vis resource preservation and sustainability. The pressure on the environment is exceeding its capacity for regeneration. Unless current ways of managing these natural resources change, an irreversible degradation of the ecosystems is inevitable. This would have direct economic and environmental consequences for the population at the local level, as well as impact medium and long-term national development strategies. It would further jeopardize sub-regional and international efforts to protect and maintain significant coastal ecosystem in particular related to Guinea's important mangrove stands (one fourth of the total in West Africa).

(iii) Sector issue 3: Inadequate legal, policy and institutional framework

As in many other countries in the sub-region, the implementation and enforcement of policy, legal and institutional framework for coastal zone related activities is insufficient to cope with the complexity and dynamics of integrated coastal zone management. The current related legal framework include: the 1987 Environment Code, 1999 Forestry Code, 1990 Financial and Fiscal Regime of CRDs, 1995 Law, establishing Mining Code, 1994 Law, establishing Water Code 1995 Code of Livestock Farming and animal products, 1995 Law establishing Code of Maritime Fisheries, 1996 Law organizing continental fishing in Guinea, 1995 Law establishing Code pastoral, 1997 Law adopting and enacting Code for wild fauna protection and hunting regulations. A large number of institutions linked to various sectors are engaged in many economic activities that affect directly or indirectly coastal wetlands and marine ecosystems. These institutions have different mandates that are based on laws and policies that differ in more than one way. The need to ensure collaboration among these institutions in order to develop an integrated coastal zone management policy faces several challenges, such as (i) low technical, human and financial capacity of many of these institutions in coastal resource management; and (ii) lack of effective mechanism to coordinate activities and establish consultation among various institutions and donor-funded activities whose activities have direct impacts on coastal ecosystems.

Government Strategy.

(1) Biodiversity conservation

The Government adopted the National Strategy and Action Plan for Biological Diversity in 2002. The proposed action for the conservation of biological diversity include: (i) the need to strengthen Government institutions to define policy, collect and analyze information and enforce existing legislaton; (ii) reinforcing the fight against poverty; (iii) increase the participation of local communities in conservation activities; (iv) improve the organizational capacity of communities to better take into consideration conservation activities; (v); preservation of fragile or threatened ecosystems of pronounced global and national interest; (vi) strengthen the land management and land use planning process; (vi) intensify the research, inventory and collection of varieties of threatened varieties for their conservation; and (vii) put in place a framework for prevention of bio-diversity related risks.

It needs to be recognized that for many years, Guinea conservation efforts focused on forest ecosystem protection and did not target the coastal zone (e.g. the Government established classified forests to conserve and protect biodiversity in-situ in 1947). This leads to the current situation where Guinea has not yet established formally protected areas in its coastal zone, as is the case in neighboring Guinea-Bissau with which the coastal zone shares many characteristics. However, six Ramsar sites in the coastal zone were designated in 1993 as wetlands of international importance because of their unique biodiversity. These sites are: Ile Alcatraz, Iles Tristao, Rio Pongo, Ile Blanche, Konkouré and Rio Kapatchez (see also Box 1). All these sites are state owned and officially managed by the National Directorate for Forestry and Water Resources (*Direction Nationale des Eaux et Forets*, DNEF). With the exception of Ile Alcatraz (classified as sanctuary) no formal designation has been extended and no financial or technical measures have been taken to provide protection to any of these areas from poachers and illegal logging and to support local authorities or communities in this regard.

Box 1. Ramsar Sites in Coastal Zone

Ile Alcatraz (1 ha; 10º38'N 015º23'W). Shallow marine waters, sandy intertidal zones, and two small islands. The larger (Ile Alcatraz) is rocky, devoid of vegetation and covered by a thick layer of guano, providing nesting habitat for the largest colony (3,000 pairs) of *Sula leucogaster* in West Africa. The smaller, Ile de Naufrage, ia a low sand bank, remaining uncovered at high tide, providing roosting grounds for sterns (including *Sterna*

maxima, Chlidonias biger, Sterna caspia, S. hirundo, S. albifrons, S. sandivicensis). Surrounding waters support dolphins and marine turtles. The site is unusual in West Africa for the occurrence of coral and rare fish species. It is the last substantial refuge in Guinea for *Lepidochelys olivacea (3,000 pairs)*, which reproduce here. Little is known about the intertidal and submarine habitats although dolphin, manatee, shark and giantturtle occur.

Iles Tristao (85,000 ha; 10º55'N 015º00'W). An estuarine complex of extensive mangrove forests and sandy intertidal zones. The site contains several villages where activities include traditional fishing, rice cultivation, and small-scale horticulture. The area supports nesting birds, including *Threskionis aethiopica*, *Platalea alba*, *Larus cirrocephalus* and *Sterna caspia*, while other notable species are thought to breed in the area (e.g. *Ardea goliath*, *Ciconia episcopus*, *Scopus umbretta* and *Haliaaeetus vocifer*). Wintering birds include *Phoenicopterus ruber roses* and *Pandion haliaetus*. Mammals include the globally threatened manatee *Tricechus senegalensis*.

Rio Pongo (30,000 ha; 10º08'N 014º08'W). Extensive estuarine complex dominated by pristine mangrove forests. Several small villages dependent on traditional fishing and subsistence rice growing are found on stabilized dune ridges within the site. Other human activities include wood cutting by outsiders, poaching, and disturbance of nesting birds. Ramsar site no. 574.

Ile Blanche (10 ha; 09º26'N 013º46'W) , is a testing and laying area for green turtles - *Lepidochelys olivacea* - and its last substantial refuge in Guinea. This site also has, quite unusually, a coral reef supporting some rare species of fish.

Konkouré (90,000 ha; 09º45'N 013º41'W). An estuarine complex, forming part of the Konkouré River Delta, with extensive intertidal mud/sand flats, mangrove forests and adjoining marshes. The Mangroves provide nesting sites for several rare bird species (*Ciciona episcopus*, *Scopus umbretta*, *Ardea goliath* and *Haliaeetus vocifer*) and a resting ground for several hundred grey pelicans. Mudflats support large numbers of wintering Palearctic shorebirds (*Recurvirostra avosetta*). Mammals include the possibly threatened bottlenose dolphin (*Tursiops truncatus*) and the gobally threatened manatee *Trichechus senegalensis*.

Rio Kapatchez (20,000 ha; 10º25'N 014º33'W). A complex of mangrove forests, intertidal mud/sand flats, and freshwater marshes supporting various nesting waterbirds (two rare species), two species of flamingos, and large numbers of wintering shorebirds. The site includes marshy coastal plains bordered by a stabilized dune cordon. A small island is important as a high tide roost for shorebirds. Human activities include traditional fishing and subsistence rice cultivation. Intensive rice cultivation occurs in surrounding areas. Ramsar site no. 573.

Looking at other countries in the sub-region which have established marine protected areas (MPAs) to protect significant biodiversity, the Government of Guinea committed itself to undertake concrete steps for the protection and sustainable use of its coastal resources. Supported by the Regional Program for the Conservation of West Africa's Coastal Zone (*Programme régional de conservation de la zone côtière et marine d'Afrique de l'Ouest, PRCM*), whose member states include Guinea, Guinea-Bissau, Senegal, Gambia, Mauritania, Cap Vert and international partners such as IUCN, WWF, FIBA, the Government of Guinea has engaged itself over the past 2 years in an inter-sectoral and sub-regional stakeholder consultation process to identify threats, root causes and options to remove these barriers to coastal biodiversity conservation and local development.

One result was the pre-identification of two specific coastal Ramsar sites for the establishment of a protected area in 2003. The area includes the group of islands "Tristao" (Ramsar site no 572) and Alcatraz (Ramsar site no 517), with a total area of 95 ha (see annex 4 for details of the ecological and socio-cultural criteria list). Additional research, information collection and analysis activities to assess the potential of additional sites are being carried out as part of project preparation.

Criteria used to select the pilot sites supported by the project

Two sites, Iles Tristao/Alcatraz and Rio Pongo were pre-selected on the basis of the following criteria:

- High globally important biodiversity value for conservation and representativeness for coastal zone ecosystems
- High opportunities for transboundary cooperation (in particular with Guinea-Buissau
- High potential for stabilizing resource base (high species reproduction potential)
- High poverty incidence with low socio-economic development, limited national and international action
- Potential for leveraging resources from other partners
- Community-willingness to participate
- Replicability of approach for establishment of protected area
- Presence of local and sub-regional inadequate management activities threatening habitat and species

In the absence of a policy or legal framework for MPAs in Guinea, there is no official definition of an MPA available. There are in addition many different types of MPA, varying considerably in their purpose or objective; size and level of protection; and name and the legislation under which they are established. Given the importance of the interlinkages between the different ecological zones in the coastal area through a dense hydrological network, greatly improved management of the three main ecological zones is needed if the health and productivity of coastal and marine ecosystems and their related biodiversity are to be maintained. As the term MPA seems to be mostly focused on marine resources, the term *protected area* is used in this document, except for where it concerns already established MPAs in other countries.

The preferred approach in Guinea is to establish a network or system of protected areas in the coastal zone that covers the diversity of distinguishable ecosystem types, thus protecting species by protecting their habitats. A representative system can help to:

- maintain biodiversity
- maintain ecological processes and systems
- allow species to evolve and function undisturbed
- provide a safety margin against human-induced and natural disasters
- provide a solid ecological base from which threatened species can recover.

Lessons learned from other countries form the basis for this approach. They include the following:

- most bioregions are under-represented;
- many habitats types are underrepresented;
- most areas are too small to be effective (irrespective of their level of protection);
- most areas are relatively isolated from each other; and
- most areas are not managed or assessed.

In addition, it is clear from experience elsewhere that the areas cannot be suitably protected unless supporting activities are undertaken in the upstream parts of the ecosystem as continued poor natural

resource use here will undermine the positive effect of project activities downstream and pose a high risk that the project may not be able to meet its objectives. Functional linkages between the different parts of the ecosystem need to be maintained and the health and productivity of coastal and marine ecosystems and their related biodiversity are to be protected. In order to achieve this, the project would adopt a watershed approach in which support activities for local populations are carried out in the watersheds that form part of a coherent ecosystem with the three Ramsar sites supported under the project. All CRDs covering these watersheds would be covered by the fourth year of the project.

The Government of Guinea is strongly committed (i) to implement its National Biodiversity Strategy and Action Plan and associated sector strategies, (ii) to strengthen its legal, institutional and policy framework for biodiversity conservation and integrated coastal zone management, (iii) to build and reinforce targeted capacity at national coastal zone planning and research level as well as at decentralized level, (iv) to establish and manage its first marine protected area as a tool to contribute to the long-term ecological viability of coastal and marine systems, to maintain ecological process and systems and to protect its biodiversity at all levelst, and (v) to support the institutionalizing and further strengthening of its initial coastal monitoring and evaluation efforts of the coastal zone dynamics.

(2) Poverty reduction

According to the 1996 Guinea Poverty Assessment Study, poverty remains an overwhelmingly rural phenomenon; over 52 percent of the rural population and 25 percent of the urban population live below the poverty line. The population has also expressed a strong willingness to take on increased responsibility for local development, so community empowerment should be a priority concern of development strategies. During implementation of the PACV, local populations have increasingly expressed an interest in environment related activities as part of their local development planning, recognizing the deterioration of their natural resource basis having a direct impact on their livelihood. The main weakness of the first phase of the PACV is that it gives inadequate priority to environmental issues.

(3) Decentralization

The PACV reflects the strategic priorities of government and those of the key stakeholders in community-based decentralized rural development. The PACV endeavors to reduce poverty and improve living conditions of the rural poor by promoting a decentralized and cross-sectoral approach to rural development. By transferring responsibilities and resources to local government and strengthening the planning and managerial capacity of rural communities, the program will promote an increased relevance of local investment decisions, and better control on investment costs and maintenance. It will also encourage collaboration between the various actors in development (for example, civil society, government line ministries, and the private sector) and will also contribute to economic development, political stability, good governance, and democratization.

3. Sector issues to be addressed by the project and strategic choices:

The main issue to be addressed by the project is the deterioration of the natural resource base in the coastal zone area, in particular the destruction of the mangrove forests leading to a decline in biodiversity (habitats and species as well as ecosystems). The project will help the Government addressing key areas of the sector issues mentioned above, in particular:

- the strengthening of key Government institutions involved in defining policy, collection and analysis of information and enforcement of existing legislaton;
- reinforcing the fight against poverty through the incremental provision for an existing fund for micro-projects for sustainable alternative livelihood options;

- increase the participation of local communities in conservation activities;
- improve the organizational capacity of communities, NGOs and decentralized governmental services to better take into consideration conservation activities;
- preservation of fragile or threatened ecosystems of pronounced global and national interest through the creation of at least one protected area around priority Ramsar sites;
- strengthen the land management and land use planning process at both the CRD and regional level using the watersheds that include the different watersheds as a point of departure; and
- intensify the research, inventory and collection of threatened varieties for their conservation.

The project's strategic choices concerning the three mentioned sector issues include the following:

(1) Biodiversity conservation to stabilize or improve ecosystem services for range of resource users: Due to the proposed project's limited resources and its relatively short implementation period (4 years to match the baseline project PACV's second phase) and based on an overall assessment of the project context, a strategic decision was made to tailor the project design to the absorptive capacity, feasibility and desired socio-economic and environmental impact. Lessons learned from other projects have shown that in particular coastal zone projects are often overly ambitious and do not include a phased approach for learning and up-scaling. The proposed project will therefore focus only on specific sites for conservation and protection and not cover the entire coastal zone. It will also not focus on fisheries management other than artisanal fisheries in selected areas, given the large number of issues involved and the concomittant high resource requirement. Collaboration will be sought with other already ongoing donor supported activities in this area. The project will reinforce the strategic, policy, legal and institutional framework for sustainable coastal zone management and provide for targeted capacity building support for the major stakeholders.

Furthermore, the project design is built on a fully participatory approach as the success of demarcating, designing and managing protected areas depends upon direct involvement, commitment and participation of local populations and local authorities. The project will also promote a coastal zone forum for coordination of activities. The forum would count as its members a wide range of key stakeholders such as governmental services, NGOs, scientific and academic institutions, and representatives from donor supported projects and programs. International partners involved in the establishment of MPAs in other countries (such as WWF, IUCN, FIBA) will provide assistance, experiences and knowledge and adapt it to the national and sub-regional needs.

(2) Poverty reduction and promoting enlarged alternative livelihood options to reduce pressure on resource base

The project builds on and further strengthens promising results of the first phase of the PACV which represents one of the key instruments for implementing Guinea's Poverty Reduction Strategy. The PACV is a 12-year, 3-phase APL, co-financed by IDA, the International Fund for Agricultural Development (IFAD), the African Development Fund (ADF), the Agence Française de Développement (AFD), beneficiaries and the Guinean Government. Its main objective is to help reduce rural poverty through capacity-building at the level of the CRD. To this end, the project includes a component specifically geared to training in the operation of decentralized institutions, works oversight and good governance. The Program is also concerned with streamlining the legislative and regulatory framework; fiscal and financial decentralization; the development of the CRDs' capacity to manage local development programs; and institution building within the Ministry of Territorial Administration and Decentralization (*Ministère de l'Administration Territoriale et de la Décentralization*, MATD), which is responsible for this component. All 303 CRDs are to be included by the program's end. The program's first phase of implementation, spanning the four years from 1999 through 2004, involves about 100 CRDs. The selected CRDs for the

first phase are located in all four natural regions, based on their initial ability and willingness to collaborate with the project. National coordination of the project is the responsibility of the Ministry of Planning. A quality review (QAG) of implementation progress of the program took place in November 2002, which rated project implementation status as well as progress towards achieving the project's development objectives satisfactory.

The first phase (PACV I) has three specific objectives: (i) to establish an effective and efficient mechanism for transferring public funds to local communities for the financing of prioritized rural community infrastructure; (ii) to improve the regulatory, institutional, and fiscal environment and develop local capacity for decentralized rural development; and (iii) to rehabilitate and to promote regular maintenance of infrastructure and rural roads. In support of these objectives, the PACV I has four components:

- Local Investment Fund (LIF) - from which participating CRDs can draw up to US$50,000 per annum, based on their ability to co-pay part of the cost of the proposed investments in cash and in-kind, for a variety of primarily socio-economic infrastructure micro-projects;
- Local Capacity-building - support to participating communities to strengthen their abilities to identify and implement priority investment projects;
- Rural roads - maintenance and rehabilitation of key large-scale rural infrastructure;
- Project management.

The PACV LIF only finances environmental activities that mitigate the effects of its infrastructure investments or reforestation of communal forests. In addition, the LIF does not fund activities that benefit more than one CRD. The project seeks to address this by adding a number of investments (through a positive list) that would provide incentives to local populations to undertake activities that would be protective of the environment. In addition, micro-projects that would need to be implemented in more than one CRD at a time, will also be eligible.

(3) Decentralization process to strengthen local authorities and communities in local development planning and implementation

The main shortfall of the PACV is that its capacity building activities do not give priority to environmental issues, as these activities are presently not eligible for funding under its LIF (except for certain types of reforestation activities). The project would provide additional means to include these elements to the participatory diagnostic. This would strengthen local populations' abilities to recognize environmental threats that directly impact on present and future quality of life. These threats would be analyzed with the multi-disciplinary teams from the PACV to draw up appropriate investment plans.

Summary of projects strategic choices:

- Piloting and documenting protected area establishment around Iles de Tristao and Alcatraz
- Assessing other potential sites for protected areas and develop up-scaling strategy
- Strengthening institutional, policy and regulatory framework for sustainable coastal zone management and in particular for protected area development
- Selecting institutional partners for planning and execution on basis of competence and motivation
- Promoting stakeholder coordination in the coastal zone
- Supporting sustainable monitoring and evaluation system in the coastal zone
- Promoting a phased approach
- Building on the PACV approach to strengthen local capacity for integrated approaches of IEC, diagnostic and planning exercises in 10-20 CRDs around the targeted Ramsar sites
- Coordinating and collaborating closely with Guinea-Bissau (WB/GEF project under preparation). Guinea Bissau plans to enlarge its network of MPAs and to establish an MPA bordering the Tristao Islands. Benefits will be economies of scale for joint surveys and transboundary diagnostic, training, communication and fundraising under PRCM and eventually joint umbrella organization once the

protected areas in Guinea's Coastal Zone have been established.

C. Project Description Summary

1. Project components (see Annex 1):

To achieve its objectives, the project will build on and closely collaborate with the PACV, which would constitute a substantial part of the baseline program. Other main associated institutions and initiatives include the Ministry of Fisheries through its National Center for Fisheries Research in Boussoura (*Centre National des Sciences Halieutiques – Bousssoura*, CNSH-B), the Ministry of Agriculture and Livestock through its National Directorate for Forestry and Water (*Direction Nationale des Eaux et Forets*, DNEF), the Ministry of Planning, the Guinea Coastal Zone Observatory (*Observatoire de la Guinée Maritime*, OGM), the Support Program for the Integrated Management of Natural Resources of the Niger and Gambia Watersheds (*Appui à la gestion intégrée des ressources naturelles des bassins du Niger et de la Gambie*, AGIR) and international NGOs working on the sub-region on coastal and marine biodiversity issues.

Phasing:

The project is being jointly prepared with the second phase of the PACV (PACV II), which will be implemented from 2005 – 2009. A potential follow-on project could coincide with the third phase of the PACV, which will run from 2010-2014. During PACV II the component 3 " Rural roads" will likely to be integrated into the Second National Rural Infrastructure Project or substantially redesigned. The project will not directly support this component. The first phase of the PACV is likely to be extended by one year until June 30, 2005. In order to avoid delayed preparation and implementation of the project because of delays in the PACV II, selection of initial intervention areas has kept into account existing coverage of the PACV.

Project Components:

The project has five closely inter-linked components. Three of these will provide incremental support to three components of the PACV. Two other components were added following a sector analysis of the coastal zone, which identified several threats to sites of global biodiversity importance. These components do not have an equivalent in the PACV and go beyond the objectives of the PACV. The project therefore seeks to address these threats in and around the targeted sites in collaboration with other partners and initiatives (Ministry of Planning, Ministry of Fisheries, Ministry of Mining, Ecology and the Environment, Ministry of Agriculture and Livestock, CNSH-B, OGM, AGIR, PRCM - *Programme Régionale de Conservation de la zone côtière et marine de l'Afrique de l'ouest* - WWF, FIBA, IUCN, Conservation International, etc).

Component 1: Protection and conservation of coastal Ramsar sites

This is the first of the two additional components, which does not have an equivalent in PACV.

Guinea's coastal zone has been identified as one of the West African biodiversity hotspots, however, until now, Guinea is the only country in the sub-region that has not established a protected area to conserve and enhance globally important biodiversity. The government has committed itself to the creation of a protected area as part of a regional network initiative (PRCM). Therefore, the project, through this component, aims to provide the necessary strategic and operational tools and experiences to establish at least one protected area through a participatory approach with concerned communities. This component will use lessons learned from other countries and initiatives in the sub-region to adapt them to the country and site-specific context.

It will have 2 sub-components:

1.1 Protected areas: This sub-component aims to establish at least one protected area. During preparation, two potential intervention areas, incorporating wetlands recognized under the Ramsar Convention, have been identified (i) Iles Tristao and Ile Alcatraz (two separate sites under the Ramsar convention) and (ii) Rio Pongo. The below map shows the different coastal Ramsar sites.

The sub-component will support the detailed mapping, inventory, diagnostic, and creation of the protected area. The collection of site specific biological, social, and economic data would employ existing information, databases, and updated satellite images. The preparation of studies, consultations, and proposals for creating additional new protected areas will include environmental and social studies carried out locally, as well as land tenure assessments. Further, the sub-component will provide technical assistance to develop an operational toolbox, based on the ones used by the PACV, for a replicable community-based approach. The toolbox will cover all phases from community-based information and sensibilization to participatory demarcation of proposed sites and planning of integrated land management plans. These plans will include specific measures to protect threatened habitats of global importance and to restore degraded sites with the communities living in and around the protected area. It will focus on training and capacity building for sustainable management of coastal zone ecosystems by local communities and community-based organizations as key change agents. As mentioned earlier, the project seeks to take a holistic approach to biodiversity conversation. The bufferzone of the protected area would therefore coincide with the watershed of the Rio Komponi, which is an integral part of the ecosystem of the protected area. Direct support to communities and CRDs in the larger watershed of the Rio Komponi, creating a sustainable buffer zone around the protected area, would be provided under components 3 and 4.

For the Rio Pongo site, the project will support all preparatory work needed for the establishment of a protected aea. A second protected area may be established before the end of the project depending on the replicability of experiences gained with the first site. In the absence of another donor presently supporting these activities, the project would provide support to the CNSH-B and the DNEF to implement these activities (incremental operating funds, vehicles and equipment, short-term consulting services, and training). Expatriate technical assistance is expected to be provided by international NGOs.

Map: Coastal Zone Ramsar Sites.

1.2. Impact Monitoring and Evaluation. Project monitoring would include information on biodiversity status (key indicator/species groups), pressure on ecosystems (levels of threat), water resources and climate, island effect (levels of connectivity), and management effectiveness. The monitoring system will be piloted in the two CRDs that include the first protected area before being applied to the full project zone. This sub-component aims to support and strengthen the existing coastal zone monitoring system in relation to the identified sites for protected areas. Socio-economic and ecological indicators have been developed by OGM and will be tested and adapted, using a participatory approach with communities, during project preparation. The indicators are expected to be operational by March 2004. Baseline studies are being carried out in the respective watersheds around selected sites under PDF-B funding. The project will fund subsequent studies at mid-term and end of project, using the same methodology as the baseline study to ensure compatibility of results, which will serve to evaluate progress towards the project's objectives and confirm or adjust interventions. Training will cover data collection methods, interpretation and implementation of the biodiversity monitoring system, dissemination activities for preparing local

communities, and methods for accessing and providing information relevant to the monitoring of marine protected areas.

The site-specific information from the studies will be fed into the existing geo-referenced Environmental Information System database on local ecology, socio-economic dynamics and human activities and their impact on the coastal zone, which is maintained by OGM. This would ensure the continued availability of information to a larger audience.

The GEF grant will only provide funding for the incremental costs of carrying out the activities directly related to the project, as the French Government is already funding a large part of the costs of the OGM.

Component 2: Institutional strengthening for integrated coastal zone management
This is the second additional component, which does not have an equivalent in PACV.

The weak capacity of institutions at national and regional level to sustainably plan, manage and monitor the area's natural resources and coastal ecosystems is a barrier to the effective protection of coastal biodiversity in Guinea. Targeted capacity building will be provided for stakeholders at national and local level. The specific objective of this component therefore seeks to strengthen the framework for integrated coastal zone management with a view to mainstreaming biodiversity conservation and the establishment of a network of protected areas in the coastal zone at the national and sub-regional level. It will have 2 sub-components:

2.1. Framework for sustainable coastal zone management:
Under this sub-component, three sets of activities would be executed: (i) the development of an multi-sectoral coastal zone management master plan, (ii) development of a vision and policy framework for a network of coastal zone protected areas in Guinea including an action plan with sub-regional linkages, and (iii) a study to identify options for financial sustainability of such protected areas.

I. The first set of studies aims to review and evaluate existing sub-sectoral master plans concerning the natural region (Master Plan for Guinea Maritime from 1992, Rice development strategy, Mangrove management, shrimps cultivation, mining, and possibly others to be identified (including the "Decret pour la creation d'un Parc National a Boke" from 1925). The project seeks to adapt these into a coherent multi-sectoral strategy for the sustainable development of the coastal zone. Both the preliminary results and the final report will be discussed in a national workshop for validation of recommendations.

II. The process to develop a protected area policy will focus on setting goals and principles, concepts, public participation process, legislation and socio-economic consideration. The process will be supported by international NGOs and regional projects active in the sub-region (including the PRCM and the regional fisheries management project). Best practice approaches will be reviewed on applicability and replicability to the Guinean context. In the context of the action plan it aims to build on work done by other donors to draft application decrees of existing legislation, so that the use of the protected area resource base is fully regulated and monitorable (surveillance).

III. The third set of studies will explore different options to ensure financial sustainability for the conservation of coastal biodiversity and its protected areas, including but not limited to the establishment of an environmental trust fund. It will also investigate local level partnerships with financial and development agents for continued implementation of productive activities that combine conservation with socio-economic use of the ecosystem.

The sub-component will be managed by the studies unit within the Ministry of Plan. The GEF grant will fund the second and third sets of studies. The first set of studies will be funded in conjunction with planned development strategies, with the project providing gap funding.

2.2. Guinea Coastal Zone Knowledge and Communication:

This sub-component is concerned with the existing knowledge and communication gaps at sub-regional, national, and local level. It therefore aims to increase and strengthen coordination efforts between concerned stakeholders.

The project will support the establishment of a permanent forum to discuss and suggest updates or new strategic policies for the conservation and preservation of the coastal zone. At the national level this would support the harmonization of approaches in the coastal zone, limit duplication of activities and support the integration of sustainable environmental resource use in development activities. At the sub-regional level the forum would seek collaboration with other projects or programs that have similar objectives to this project or that may have an impact on Guinea's coastal zone. The forum would seek to enhance the impact of different activities through the exchange of information. Thus the forum will also add to sustainability of project activities. The project will support annual coastal zone management meetings and regular information exchange workshops on environmentally sustainable management and biodiversity in coastal zones in order to strengthen the knowledge base on the threats, causes and status of the coastal zone and to make this information available to decision-makers. Members of the forum would include a broad range of stakeholders from Guinea and countries in the sub-region and would be chaired by a senior Government representative. The sub-component will support Guinea's participation in the PRCM and other sub-regional bodies to gain from lessons learned elsewhere and replicate and adapt successful models for coastal zone conservation and management. In particular, linkages will be established with other GEF funded national and regional projects such as those planned for Senegal, the GambiaGuinea-Bissau, and the Guinea Current LME Project.

The project will provide support for the creation of a multimedia library of coastal documentation at OGM, which will serve as a repository of data collected from a variety of sources as part of project preparation and implementation. Part or all of the information may be placed on the internet. NGOs, research institutes, other donor funded projects, will be invited to use this internet site as a portal to ensure easier access of information. Information copied onto CDs or DVDs will be made available to interested Government agencies. A communications strategy would be developed to disseminate information to local populations (educational materials, radio spots in the local language, etc.).

The sub-component will be managed by the Ministry of Plan through its Rural and Environment Division. The GEF grant would fund the communications strategy. Participation of Guinea in sub-regional activities and the permanent forum would be shared with all donors involved in the coastal zone.

Component 3: The Local Investment Fund.

The LIF component of the PACV aims to stimulate local development and give the means to project beneficiaries to reduce dependencies on unsustainable natural resource exploitation by transferring grants directly to CRDs. The LIF has the following characteristics:

- participatory identification and selection of micro-projects
- transparent management of resources
- local control of all construction performed under contract; and
- local responsibility for maintenance

The PACV LIF has two parts (windows): (a) a Village Investment Fund (VIF) which constitutes 95% of the component's funds, and (b) a regional (involving more than one CRD) Innovation Fund (IF) representing 5% of funding, which has not been operational during the first phase. During the first phase of the PACV the VIF is funding basic infrastructure such as village access roads, small bridges and drifts, health posts, schools, latrines and water points. For all activities the VIF contributes 80% of the costs with communities contributing the remainder in in-kind (15%) and cash contributions (5%).

The project does not seek to establish new procedures for its LIF contribution. Instead it will provide additional resources to communities using procedures tested by the PACV during the first phase. Procedures will be transparent so that for communities there is only one FIL.

3.1: Village Investment Fund (VIF) for sustainable management of resource base

The project would provide financial resource for the populations in the CRDs covering the watersheds that form an integrated part of the ecological system culminating in the Ramsar sites. Initially, activities will focus on the watershed that includes the Alcatraz/Tristao sites and then be expanded as experience is gained. It will fund incremental activities to enhance the resource base and restore globally important biodiversity identified during project preparation. The supported activities aim to stop and where possible reverse the destruction of habitats of local ecological, economical and globally important biodiversity, which is mainly related to the unsustainable practices for artisanal fishery, mining, farming and livestock. All sub-projects under the VIF are executed by beneficiary groups who will champion the activities.

Eligibility criteria for VIF activities have been identified during preparation and will be adapted for each project target coastal site. The project preparation funds are used to test the feasibility of the pilot approach in the two CRDs, in and around the islands of Alcatraz and Tristao. These two CRDs cover a substantial part of the Rio Komponi watershed.

The component approach is two-fold:
First piloting the combined VIF in the two CRDs covering and or neighboring the identified sites for the first protected area (initially Iles Tristao and Alcatraz), and scond, expanding this approach to other parts of the coastal zone by targeting CRDs around three of the remaining four Ramsar sites and sites in the zone south of Conakry on which at the present time inadequate information is available.

Micro-project / typology will likely include:

- Analyze the potential for incentives for reforestation and use of fuel efficient technologies for activities that currently account for a high demand on mangrove wood (salt making, smoked fish, energy efficient stoves)
- Use of alternative agricultural technologies, and testing their environmental and economic sustainability and whether they improve income of local population as well as the ecological and economic sustainability of production systems.
- Incentives to plant and use medicinal plants
- Support to alternative livelihood strategies targeted at sub-groups that hitherto lived from unsustainable exploitation of natural resources (all involved in fisheries, hunters, charcoal manufacturers, etc.)
- Rehabilitation of soils and vegetation (dissemination of seeds and/or possibilities for establishing nurseries)
- Protection of river banks and slopes

3.2: Innovation Fund (IF)

Project support to this funding window would provide resources for the following types of subprojects that would have:

- large external benefits and that need to be implemented as part of activities covering two or more CRDs (livestock corridors, ad hoc research in adapted agricultural technologies, extension of adapted agricultural technologies, watershed protection activities, etc.);
- implementation of research-based activities to improve the resource base;
- expected benefits that will not be visible for sometime or are, as in the case of pilot activities, uncertain; and
- a private character such as pilot income-generating activities (e.g. eco-tourism, commercialization of medicinal plants, etc.).

The component would be managed by the PACV. GEF grant support to this activity would in part be incremental and would augment resources available under the PACV II FIL as these are insufficient, and in part they would provide funding for activities not eligible under the FIL. The project will not intervene everywhere the PACV has a presence as this would unnecesarily dilute resources and not yield the hoped for outcome. Instead, the project will only intervene together with the PACV in those CRDs where the populations activities directly impact the wetlands and areas of high biodiversity value (the watersheds of the selected Ramsar sites). This is most likely achieved by selecting CRDs and communities sharing a common watershed with these sites. On this basis, the project is expected to intervene alongside the PACV in 10-20 CRDs in the coastal zone by year 4. The project will use the experience gained under the AGIR project to help guide pilot activities and to ensure that donor supported activities in the same watershed follow a coherent approach, even in areas that cross political boundaries.

Component 4: Support for Local Capacity Building.

The objective of this component is to rationalize and operationalize the regulatory and institutional environment for local development. The component supports the following activities: (a) strengthen the capacity of CRDs to manage local development programs; (b) sensitizing and training elected local officials and CRD administrative and technical staff in the areas of local development government, planning, and financial management.

Incremental GEF grant funding to this component would focus on providing support to CRDs to develop and manage environmentally sustainable local development programs, with emphasis on biodiversity conservation.

The current land management plans are focusing mainly only on community-based infrastructures and are reviewed based on limited information. The project will provide additional funding to the CRDs, change agents and communities in the target watersheds for training and tools to assist them in devising sustainable land management plans that specifically include biodiversity protection and sustainable use. In addition, it will support and encourage community organization and the formation of associations (e.g., artisanal fishery associations). The project will pay particular attention that land management plans of the different communities/CRDs form a coherent framework based on constraints and threats elsewhere in the watershed and address key environmental project priorities. In addition, it will verify whether proposed activities do not have an adverse impact downstream. To this effect a watershed committee will be formed covering most or all of the watershed of which a Ramsar site is part. These watershed committees will include representatives of technical agencies and the CRDs covering the watershed. Where concerns arise, participatory reviews will be organized with with concerned communities.

Capacity building activities supported under the project include:

- Training and organization of local project beneficiaries so that they can participate in the process and be conscious of and fully understand the situation with which they live and the consequences of different actions on the environment and their longer-term livelihoods;
- Organization of field visits to show the interaction of different activities in the watershed on the natural resource base;
- Build and/or strengthen the capacity of beneficiary groups to identify and implement activities under the LIF;
- Development of technical capacity related to conservation of the environment and sustainable development, in institutions involved in project execution and management;
- Train decision makers and opinion leaders on the benefits of the sustainable use of natural resources and techniques for preservation and conservation; and
- Strengthen the existing institutional structure in order to reorient it towards sustainable environmental management

The approach will be replicated throughout the coastal zone by the PACV once tested and refined.

Component 5: Project Management and Monitoring and Evaluation.

The objective of this component is to ensure cost-effective, efficient and streamlined project implementation of the four other components. The project would provide incremental funding only to the implementing agencies.

5.1. Project Management.

Overall management and coordination of the project will be ensured by the Project Coordinator (*Coordinateur du Project*, CP) in the Ministry of Planning. The CP is a line manager who will need support for the additional responsibilities of the project. The CP will be supported in his work by a short-term consultant (about 8 weeks per year), who will assist in the compilation of the progress reports and the annual work programs and related budgets.

The CNSH-B will implement the first component of the project as part of its core activities in collaboration with DNEF. Both agencies have strong technical capacities and have a long history of working together in the project intervention sites. The project would provide additional equipment and vehicles, and incremental operating funds, to each of the two agencies to assist them in executing their responsibilities under the project. No additional consulting services or contractual staffing is envisaged.

The Ministry of Planning, responsible for the second component, has the technical capacity to manage the studies and other activities but lacks operating funds and equipment. The project will therefore provide sufficient operating funds and equipment to the Ministry to enable it to carry out the assigned activities.

The PACV PCU which has shown its strength during the implementation of the PACV will be appropriately strengthened by the project with the addition of an accountant, a natural resources specialist, and a secretary. Consulting services will also be provided to strengthen PACV's M&E capacity to work with the project's Geographic Information System and prepare detailed cartographic information on project CRDs. In addition, PACV will receive funding for a vehicle and equipment, and incremental operating costs.

5.2. Financial Systems and Audits.

Each agency responsible for a component under the project will maintain separate financial records by source of funds in compliance with generally accepted accounting principles, and prepares separate financial statements.

The CP will have only a small budget under the project, which will be managed by either the PACV or an accounting firm. In both cases, double signatures will be required to ensure proper management of the accounts. The PC will not have a separate special account, but instead use the same special account as the PACV albeit with different disbursement categories. The coordinator will ensure that the annual audits are organized for all project implementing agencies

CNSH-B's financial management unit will be subject to a full assessment during project preparation to ensure that it is able to manage project funds in accordance with Bank fiduciary guidelines. The manual of the PAVC will be adapted for use by the CNSH-B. CNSH-B will have its own special account to ensure that sufficient funds are available at all times for efficient project implementation. DNEF, which will support the CNSH-B in the implementation of the first component lacks the ability to manage funds in accordance with Bank guidelines and will therefore not directly manage funds.

The Ministry of Planning does not have the capacity to manage project funds in accordance with Bank fiduciary guidelines. As the project has limited resources, which are insufficient to also support such capacity building initiatives, and the requirements of project financial management are greatly different from public sector requirements, it was agreed that financial management under this component would be done under a contractual arrangement with either the PACV or an accountant firm.

PACV has a performing financial management system, which has been audited several times. The manual of the PACV, was recently updated and will be used for the second phase. Each agency responsible for a component under the PACV already maintains separate financial records in compliance with generally accepted accounting principles and prepares separate financial statements. The administrative manual of the PACV will also serve as manual for the two components of the project implemented by the PACV. Some minor changes will have to be made in software parameters and the manual to allow for expenditures to be imputed to the GEF as source of funds and to reflect the difference in sub projects. This will be carried out as part of project preparation. A separate special account and project account will be established for the project to prevent comingling of funds.

5.3. Monitoring and Evaluation. The objective of the projects performance monitoring and evaluation (M&E) system is to respond to the internal management and supervision needs of all the project's stakeholders, including the executing agencies responsible for implementing the different project components, CRDs for the microprojects, the Steering Committee, and donors, including the Government. The monitoring system is organized as a network with each executing agency in charge of a component reporting its activities to the CP, which maintains a consolidated system. In order to avoid having to build a separate system, use will be made of existing project supported Monitoring and Evaluation Units in the PACV, CNSH-B and the OGM.

Each executing agency will be required to submit a bi-annual progress report for its component to the CP no later than one month following the end of each semester. These individual reports are compiled into a consolidated progress report for the entire project. An independent analysis will be conducted at mid-term and towards the end of the project.

The mid-term review and an evaluation at the end of the project will be conducted jointly by the

Government of Guinea and interested co-financiers of the project. These reviews will be based in part on the results and recommendations of the evaluations indicated above and will help make adjustments resulting in a more efficient implementation of the project.

To measure project implementation progress, the national M&E team of the PACV will be reinforced to also measure progress under this project and be able to monitor the additional indicators under the project. The PACV M&E unit will only be responsible for the monitoring and reporting of project implementation under the responsibility of the PACV (components 2 and 3). CNSH-B and the Ministry of Planning, who will implement components 1 and 2 respectively will monitor progress implementation for the activities under their responsibility.

Project impact evaluation will be contracted out to the Guinea Maritime Observatory (OGM). This scientific Observatory has extensive experience in the coastal zone and measures trends and dynamics related to pressures on the zone's natural resources and collects data on poverty, vegetative coverage, etc. It builds on a previous, French funded scientific observatory of the mangroves (*Observatoire de la mangrove*). This observatory will receive project support to monitor the project's impact on the selected project sites. The OGM has launched an innovative approach towards indicator development and testing in two pilot sites in the coastal zone. It is based on a highly participatory approach to first assess community perceptions of livelihood and their environment over time before socio-economic and environmental indicators are defined jointly with the communities. This approach allows that communities not only understand but truly own these indicators and use them for their local decisionmaking. Communities will also be empowered to become active participants in the local monitoring and evaluation process (data collection and interpretation). Collection of other indicators specific to this project, such as information on species (flora and fauna), water quality, land use, etc., will also be tested as part of project preparation. It is expected that these indicators will be fully owned by coastal communities and incorporated in local decisionmaking processes. Data collection will take place with concerned communities. The proposed project will use this pilot approach and apply it with OGM's support in the target sites.

It should be recognized that long-term project impact cannot be measured during the four years of project implementation, acknowledging also as climatic influences play an important role, however, the collected data will contribute to a better knowledge of coastal zone issues, make informed decisions and serve as a solid foundation to evaluate a potential second phase.

Project Costing.
A Detailed cost analysis by component will be presented following the pre-appraisal mission.

Component	Indicative Costs (US$M)	% of Total	Bank financing (US$M)	% of Bank financing	GEF financing (US$M)	% of GEF financing
Protection and conservation of coastal Ramsar sites	4.40	24.4	0.00	0.0	1.50	30.0
Institutional strengthening for integrated coastal zone management	2.30	12.7	0.00	0.0	0.80	16.0
The local investment fund	5.20	28.8	3.00	42.9	1.20	24.0
Support for local capacity building	4.35	24.1	3.00	42.9	0.70	14.0
Project Management and monitoring and evaluation	1.80	10.0	1.00	14.3	0.80	16.0
Total Project Costs	18.05	100.0	7.00	100.0	5.00	100.0
Total Financing Required	18.05	100.0	7.00	100.0	5.00	100.0

Note: The project will benefit from other associated funding, such as from the European Union under the AGIR Project. Project costs and funding presented here are only for IDA and GEF as these form a coherent framework that can be implemented even if other funding is delayed or stopped. M&E costs for the GEF are high relative to the PACV because the types of assessment needed under the protected area activities is far more costly than the regular monitoring costs of the PACV.

2. Key policy and institutional reforms to be sought:

Until now, the implementation of Guinea's environmental and biodiversity agenda has been largely project based. There is an urgent need for the Government to mainstream its environmental responsibilities. One of the central thrusts of the project is thus to support the critical legal and institutional reforms considered necessary if biodiversity conservation and management is to be internalized in a coherent and sustainable manner. To this end, the project will support the following reforms:

- Strengthening Government's capacity to formulate, implement and monitor environmental safeguard laws, regulations and procedures
- Review and revision of existing national laws to ensure internal harmony and as well as consistency with the relevant international conventions ratified by Guinea; and
- Identification and legal recognition of one protected area.

More specifically, the project will pilot the implementation of new laws and regulations supporting the creation and management of protected areas in the coastal zone in Guinea. The project would increase intersectoral dialogue and joint actions by establishing a collaborative framework with DNEF, CNSH-B, DNE, AGIR, FIBA, IUCN, WWF, and local governments and other NGOs in the creation and management of protected areas. It would also develop critical core experience in creating and managing protected areas and buffer zones, synthesizing and disseminating the experiences of primary stakeholders such as the government, environmental, and biodiversity conservation agencies, and civil society. In addition, it would support the creation of a permanent forum for the coastal zone where different stakeholders can meet to exchange ideas, and discuss constraints and solutions.

3. Benefits and target population:

It is anticipated that the benefits of this project will accrue at global, regional, national and local levels.

Global and regional benefits:

- Increase of protected area system by at least 85,000 ha
- Increase of production land under sustainable management by at least 135,000 ha (with the possibility of up to 230,000 ha)
- Improvement of the effectiveness of protected area management in Guinea
- Decreased loss and degradation of critical coastal habitats and ecosystems, with associated benefits for conservation of endangered and threatened species;
- Multisectoral monitoring of prioritized biodiversity hostpot and ecosystems in and around protected area(s) linked to larger scale multisectoral monitoring systems providing data for coastal zone management, with the possibility for expansion to a transboundary protected area.
- Strengthened protection for globally and regionally significant species, including marine turtle, African manatees, chimpanzees, sharks, sea-going hippopotami, migratory birds and colobus monkeys, complementing similar regional initiatives (e.g., the GEF financed Coastal Zone Management Project in Guinea-Bissau, the Medium Sized Project in The Gambia, the West African Turtle network, etc);
- Development of replicable models for successful establishment and management of protected areas in other countries;

- Strengthened transboundary biodiversity related networks (with Guinea-Bissau).

National and local benefits:
The conservation and sustainable use of coastal and marine biodiversity and related ecosystems, and the equitable sharing of benefits from their use are fundamental to socioeconomic development and poverty alleviation both locally and nationally. The project will help:

- test practical models for devolving biodiversity and natural resource planning and management responsibilities to the local level, thus providing valuable lessons for Guinea's ongoing decentralization process;
- improve the institutional and legal framework for environment and natural resource management in general and coastal and marine biodiversity in particular;
- reduce the loss and degradation of Guinea's coastal and marine ecosystems and habitats and thus contributing to maintaining the productivity upon which national and local economies depend;
- increase stakeholder capacity (government, NGOs, communities and private sector) for participatory biodiversity and natural resource planning and management, building an in-county capacity that will transcend sectoral boundaries;
- identify and test potential alternative livelihood strategies that promote both improved biodiversity conservation/sustainable use, and improve the quality of life at the local level;
- increase awareness of the importance of biodiversity and natural resource management for local and national economic development and poverty alleviation;
- promote targeted investments in alternative revenue-generating activities in marine protected areas and buffer zones where additional private and public funding will be sought for low environmental-impact development activities to benefit local populations
- building a strong constituency for marine protected areas through partnerships, environmental education, and co-management agreements
- development of income generating activities and other economic incentives to reduce poverty and to maintain marine protected areas in the longer term

Target population:
The anticipated target population includes: local communities and resource users, selected government agencies and decision-makers at all levels, local NGOs, and the private sector in the vicinity of protected areas or key habitats of targeted species. Particular emphasis is being placed on the involvement of and benefit sharing with involved and affected local communities. A stakeholder analysis and a public involvement plan will be conducted prior to project appraisal, to: (i) clearly articulate target populations with relevant project outputs, and (ii) assess current institutional arrangements and their capacity to support the development of the project along with specific areas that require strengthening.

4. Institutional and implementation arrangements:

Implementation period: Four years (FY2005-2009 to coincide with the second phase of the PACV).

Implementation: The detailed institutional, financial, monitoring and evaluation arrangements will be confirmed during appraisal following an in-depth institutional assessment.

Oversight of project activities would be ensured through the SC, composed of higher level representatives from the Government. Representatives of each of the implementing agencies and other key stakeholders, such as NGOs and representatives of CRDs in the project intervention zone will be invited to attend the meetings and provide inputs on work programs and project implementation as appropriate. The SC would ensure policy level oversight of the program, and promote incorporation of the project's objectives into

sector-specific and national development programming. The SC would also review progress and approve annual work plans and budgets. It would meet at least once a year. In addition, specific activities would be supported at a technical level by an already established Technical Steering Committee, which would vet work programs of components 1 and 2 prior to submission.

The first component, *Protection and conservation of coastal Ramsar sites*, will be executed by CNSH-B in close collaboration with DNEF, which has management responsibility for all RAMSAR sites and has fiduciary oversight responsibilities over any protected area created under the project. Both agencies are presently already involved in preparatory work on the Ile Tristao site and technical staff have an excellent grasp of participatory approaches. In addition, CNSH-B is benefiting from substantial donor financed technical assistance. It has, together with DNEF, established links with international NGOs active in nature conservation, such as World Wildlife Fund (WWF), Conservation International (IC), International Union for the Conservation of Nature and Natural Resources (IUCN) and the Fondation Internationale du Banc d'Arguin (FIBA).

To assist the CNSH-B and DNEF in their work related to the CCAs, a Scientific Advisory Panel (SAP) would be created. The SAP will draw its membership from a broad spectrum of national and sub-regional scientists from universities, research institutions, government, and NGOs to facilitate the process of identifying and creating protected areas. The SAP will be appointed and maintained by the SC. The mandate of the panel would be to review and recommend improvements on the marine protected areas selection methodology; help identify new opportunities for conservation; and comment on proposals for marine protected areas. This mandate would help to underpin the creation of created areas with broad scientific support. It is expected that the panel would meet initially once every six months. The SAP would be an ad hoc panel assembled as part of the different steps towards creating a protected area in the coastal zone.

The CNSH-B would subcontract with the OGM to carry out the baseline studies for the different sites along the Guinean coast known for their global biodiversity value and subsequent impact studies (mid-term review and end of project) of project activities using the same methodology. OGM has extensive experience and adequate technical capacity to execute these types of studies. Moreover, it is independent from the project and a Guinean institute. The indicators for the baseline and subsequent studies are presently undergoing validity testing on a participatory basis with local populations.

The second component, *Institutional strengthening*, would be executed by the Ministry of Planning. The rationale for this arrangement is that this ministry has a multi-sectoral character and also has a mandate for donor coordination. Government will propose the department that would coordinate the different activities before the appraisal mission, so its capacity can be assessed.

The third component, *Village Investment Fund*, and the fourth component, *Community Capacity Strengthening*, would be implemented by the PACV using an adapted version of its LIF manual. PACV has the capacity to manage these activities and will be assisted in their implementation by experienced NGOs.

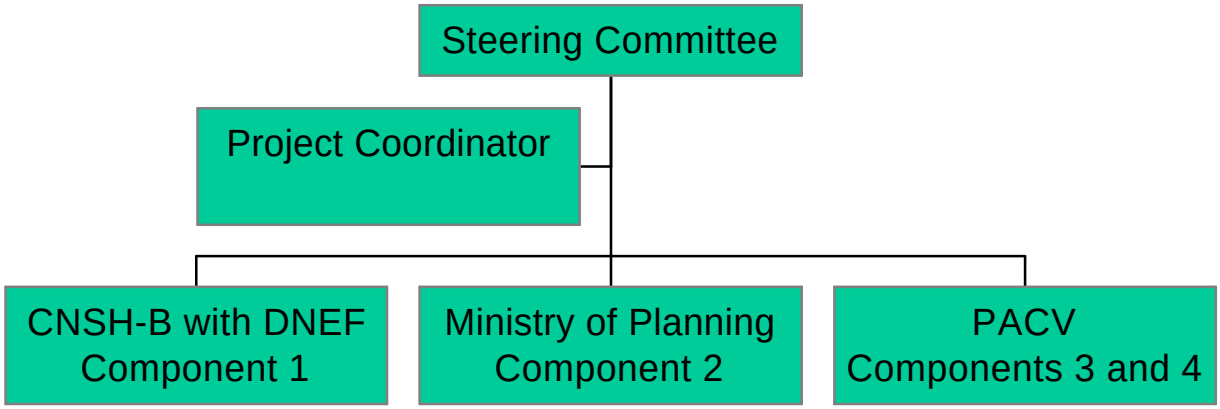
The fifth component, *Project Coordination and Management*, would be the responsibility of the CP periodically assisted by a consultant to help the coordinator put together the periodic progress reports and the consolidated annual workprograms and budgets. The CP would also serves as secretariat for the SC.

Monitoring and evaluation (M&E). Monitoring of project implementation will be the responsibility of each of the implementing agencies who will provide semi-annual progress reports to the CP. The CP will use the

aforementionned services of a consultant (two weeks per year) to cumulate the submissions and provide a consolidated overview of the project.

Participatory monitoring would be used whenever possible, to create a sense of ownership and to promote community understanding of program objectives. Impact indicators would be developed in accordance with guidelines for GEF-financed projects and would include biological/ecological and socioeconomic parameters. The three major impact studies to be carried out would be the baseline study, the mid-term study and the end of project study. These studies would be funded under the first component, as they would have a dual purpose (information on biodiversity and project impact).

Project Implementation Arrangements Summary



D. Project Rationale

1. Project alternatives considered and reasons for rejection:

Implementation arrangements: One option that was considered was to place the project entirely under PACV. This option was rejected because of the scope of the project and its global environmental objectives would have placed too many responsibilities on the PACV which far surpasses its mandate. It would thus lead to unrealistic demands on the PACV and would jeapordize its mission. In addition, the project requires a broader ownership. The option that was chosen builds upon the strengths of the different agencies involved and addresses weaknesses by incorporating numerous, competent partners/stakeholders to work with DNEF and Ministry of Plan. By maximizing stakeholder participation in project management, ownership will be expanded and increase the probability that its goals will be achieved within the proposed time frame.

Management approach of the coastal zone protected area: One option considered was to designate a National Park around the Tristao Islands as one form of protected area. However, this would imply an immediate shift from the prevailing fishing zone to a non-extractive reserve, which is not realistic based on feedback from local populations. In addition, DNEF lacks the capacity to manage such a park.

2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned).

Sector Issue	Project	Latest Supervision (PSR) Ratings (Bank-financed projects only)	
		Implementation	Development

		Progress (IP)	Objective (DO)
Bank-financed			
Community development	Village Community Support Program (PACV): First Phase	S	S
Other development agencies			

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

Project Name	Sites	Source of Funds	Implementation Period
Regional : Plan Régional de Conservation Côtière et Marine (PRCM) de l'Afrique de l'Ouest	Cape Verde, Gambia, Guinea, Guinea-Bissau, Mauritania, Senegal.	IUCN, WWF, FIBA, CI (amount for Guinea not available)	2004 - 2008
Regional: Combating Living Resource Depletion and Coastal Area Degradation in the Guinea Current through Ecosystem-based Regional Actions (PNUD/UNEP)	Angola, Benin, Cameroon, Congo DR, Cote dÍvoire, Gabon,Ghana,Equatoria Guinea, Guinea-Bissau, Liberia, Nigeria, Sao Tome & Principe, Sierra Leone, Togo.	UNDP/GEF (US$55.3 million)	2004/2005 - 2009
Appui à la Gestion Integrée des Ressources Naturelles (AGIR)	Guinea and transboundary areas with Guinea Bissau, Mali and Senegal	EU (multi-country program with no pre-set country allocation)	2000- 2005
National Capacity Needs Self-Assessment for Global Environment Management (NCSA) UNDP	National and local level relevant Institutions	GEF (US$0.225 million)	PDF A
Observatoire de la Guinee Maritime	Entire Coastal zone with more detail in northwestern areas.	AFD, FFEM, Scientifique Bordeaux3, AFVP (2.5 million Euro)	

The project will complement (though not overlap) and liaise with several other GEF-supported activities in Guinea. One such program is the GEF-funded National Capacity Needs Self-Assessment for Global Environment Management (NCSA), a UNDP-assisted review of national capacity building needs related to globally valued environmental resources, including biodiversity. The project's activities focused on Institutional Strengthening will build upon the recommendations of the NCSA. Similarly, the Integrated Management of Land Degradation through Sustainable Small-Scale Industrial Utilization of Medicinal, Aromatic and Pesticidal Plants project, a UNEP-assisted West African regional program, involves Guinea and three other countries in an effort to halt land degradation through community-based land and biodiversity preservation and the development of relevant income-generating activities. Other projects that provide synergies to this proposal include the World Bank-GEF Guinea-Bissau Coastal and Biodiversity Management Project, with which the project will work to establish a strong rapport for potential transboundary work on protected areas. Having both of these projects implemented by the World Bank allows tremendous opportunity for synergies to develop and lessons to be shared between the initiatives. Additionally, the project will ensure collaboration with the UNDP Guinea Current LME project, which spans the entire west coast of Africa. The focus of activities in Guinea of this UNDP project will be on

conducting a marine productivity assessment, integrating Guinea into the larger regional Environmental Information Management scheme of the project, and fisheries assessments, providing clear routes for strong collaboration, but no overlap among the projects. Activities funded under component 2.2 will allow for this coordination and cooperation between this project and other initiatives in the region.

3. Lessons learned and reflected in proposed project design:

Lessons have been taken from Guinea and a number of other projects, financed by the Bank and other institutions, that have shared the goal of integrated coastal zone management and the establishment of protected areas and effective, sustainable management systems.

(i) Weak capacity and lack of participation

Institutional capacity on the national and local levels has been weak, mainly due to the paucity of human and financial resources, and a lack of the lack of training on the part of some managers. As a result, proposed measures and regulations remain inoperative in the field. At the same time, the process of decentralization has remained weak in terms of its approach to Guinea's environmental issues. There is unfortunately very little public participation in the identification, formulation, and implementation of development projects, and particularly in environmental projects. This may partially explain the mixed results obtained so far in this area. Local populations, often impoverished, feel little responsibility or concern. They therefore exploit the environment, and particularly the commonly held resources, directly and without any real controls or limits. The most illustrative example of this is the denuded ring of charcoal-producing areas around the city of Conakry.

The Guinean Government's commitment to a policy of environmental protection, in combination with a transfer of responsibilities and resources to the level of local collectives and regional offices, represents an opportunity to involve all participants and invite them to share information and ideas on the sustainable and locally-based management of Guinea's natural resources and coastal biodiversity. This is an essential ingredient in the success of this program, in terms of the sustainability of its interventions and the mechanisms that are put in place.

(ii) Inadequate consideration of environmental concerns in coastal zone interventions

Over the past fifty years, public investment in the coast has thus been concentrated essentially on the problem of self-sufficiency in rice production. The preferred approach has been to stabilize and intensify production by developing hydro-agricultural infrastructure on vast expanses of coastal wetland. The agro-economic and ecological results of these interventions remain mixed, even to this day. In addition, the coastal zone (including slopes, mangroves and the ocean) has been the site of numerous development projects dealing essentially with economic issues affecting the population (agriculture, livestock, fisheries, and industry). Few interventions have dealt directly with the environment or with the preservation of the area's biodiversity, with the following exceptions:

- The mangrove project in the Bay of Sangaréah;
- The coastal studies project;
- The project concerning the RAMSAR convention on the protection of bird species; and
- The sea turtle protection project.

Most of these projects have remained narrowly focused and poorly coordinated. The lack of vision, monitoring and comprehension of methods to evaluate the effectiveness of interventions has been a problem. In the same way, the low level of popular participation in the choice of development activities

and in their implementation has caused the affected populations to adopt the stance of consumers of these projects rather than that of partners/entrepreneurs/owners. Land and resource management in a context of insecure land tenure and high population growth has more often led to predatory behaviors than to efforts at conservation or preservation.

The following general lessons from past experiences have been incorporated in the project design:

- There is a need to take into account all interrelated ecosystems (i.e., the coastal plan, the maritime wetlands, and the continental shelf) and to model the impact of planned interventions on the whole system.
- There is a need to accept beneficiaries in all their complexity (i.e., their multifarious activities, and individual and collective strategies) and in terms of their political, social and economic reality (which constitutes the dynamic and external aspect of Maritime Guinea's evolution).
- Development ambitions should remain modest, and must be planned and coordinated using a global and multi-sectoral master plan (as opposed to the current practice of having parallel master plans in different sectors).
- It is important to take the time to obtain technical and scientific validation of these master plans for development or general intervention on the coast, before a commitment is made to large-scale intervention.
- Beneficiaries must be involved and given the necessary information on which to base their considerations. They need to be helped in this task, from the design stage up to the phase of simulating post-project management. The problems of land tenure and possible land re-apportionment need to be dealt with.
- The functionality of systems can be adjusted through interventions at the level of the farmer (a case in point being situations in which interventions are limited to the provision of primary canals, the rest -- leveling, secondary and tertiary canals -- being left up to the farmers).
- It is important to take the time to help beneficiaries and to train them, over the course of several cropping seasons, in the use of the proposed new techniques. They should also receive feedback on the results of any sociological, technical and economic monitoring that has taken place.
- Methods of mass communication must be developed so that the project's contacts are not limited to a few individuals who may not be representative of the population.
- There should be an independent scientific structure capable of measuring trends and dynamics at the regional level and over an indeterminate period of time.
- Past experience should be exploited and its results disseminated.
- Inter-project interventions should be coordinated; all necessary efforts made to ensure the effectiveness of technical and monitoring services.

Thus, the project includes the following elements:

- Start with demonstration activities (pilot sites, site visits, exchanges, films, etc.) and outreach/consciousness-raising efforts (e.g., meetings, debates, etc.) under component 1 and component 4.
- Train beneficiaries and involve them in design and implementation, with close monitoring under component 1 and 4.
- Develop an overall participatory master plan and disseminate widely under component 2.
- Strengthen the legislative and institutional framework under component 2.
- Define (existing) institutional entity(s) for surveillance and coordination of coastal zone development under component 2.
- Mechanisms need to be set up to monitor adherence to commitments under component 1.

Furthermore, there is a body of experience with biodiversity projects within the World Bank and among

environmental practitioners that reconfirms the importance of (a) facilitating "direct" biodiversity conservation activities by communities or groups of people who have a vital interest in conservation, either because their livelihoods depend directly on biological resources or because their quality of life depends significantly on use and existence values of biodiversity; (b) increased participation by interested stakeholders and, in particular, local communities, NGOs, and the private sector; (c) developing a strategic policy framework for biodiversity conservation; (d) establishing financial mechanisms that fully cover operational costs on a sustainable and long-term basis; and (e) decentralizing responsibilities from the federal to state and municipal environmental agencies.

4. Indications of borrower and recipient commitment and ownership:

Guinea ratified the Convention on Biological Diversity on May 7, 1993; the World Heritage Convention in 1979, the Washington Convention on the International Trade in Endangered Species (CITES) on 20 December 1981; the Ramsar Convention in 1993, the Convention to Combat Desertification in January 1997; and the Framework Convention on Climate Change on September 7, 2000. The Government adopted the National Environmental Action Plan (NEAP) in 1994. The basic principle underlying the NEAP is the integration of the environmental dimension in the country's economic and social development policies. Two major objectives are being pursued, namely sound and sustainable resource management and the definition or strengthening of sectoral policies. The Republic of Guinea has further adopted sectoral strategies and policies for the efficient management of the environment and natural resources. They include: the National Biodiversity Strategy and Action Plan (NBSAP, 2002); the NEAP, the National Poverty Reduction Strategy (DSRP) in 2000, the National Development Plan (2001), the Mangrove Management Scheme (SDAM); the Policy Letter on Agriculture Development (LPDA) and The Land Policy Declaration in Rural Areas (DPFMR), the 2010 Vision for Guinea (2000). The National Forestry Action Plan 1987 adopted and reviewed in 1992 aims to develop and protect areas reserved for forest land, apply best practices to provide maximum of goods and benefits indefinitely, support and control the various aspects of exploitation, transformation and marketing of forest products.

The Government designated 6 coastal Ramsar sites in 1993. Further, it is an active member of the sub-regional efforts to protect the West African Coast through the MPA network (PRCM).

Finally, the GEF Focal Point renewed project endorsement on January 13, 2004.

5. Value added of Bank and Global support in this project:

There is an extensive list of existing activities, projects and programs related to rural development in the Guinea coastal zone. There is clearly a significant potential for including the contemplated project within the context of other projects and programs that are already underway. Most of the already existing activities are not confined to certain geographic areas within Guinee Maritime. In addition, they often focus on the improvement of local infrastructure (e.g., PACV and future National Rural Infrastructure Project II). The current initiatives do not, however, emphasize environmental and ecological aspects, nor are they directed to promote integrated coastal zone management in and around a CCA.

The idea for the project proposed here would be to complement the existing projects, redirect, tailor and fill in their gaps in the areas where the GEF-financed project would be carried out. The aim would be to achieve a synergistic effect between conservation with the provision of basic infrastructure services through the on-going projects and in particular PACV. The synergistic effect is demonstrated as follows: PACV funds to CRDs are targeted more towards infrastructure investments at community level while GEF funds would be more focused on technical assistance, capacity building, monitoring, strategy work and piloting of new technological approaches (for instance for improved energy efficiency in fuelwood use, soil and forest

management, reforestation) In this sense, the GEF would act as a catalyst to modify existing behavior and attitudes towards integrated coastal zone management. The incremental cost financed by GEF is thus extremely important for the process of developing priority actions for the conservation and recovery in and around marine protected areas.

The project fits solidly within the GEF Operational Program on Coastal and Marine Ecosystems, a priority area for the first, second and third Conference of the Parties to the Convention on Biological Diversity. The Bank, as a GEF implementing agency, can therefore bring incremental grant resources to assist Guinea in tackling coastal and marine biodiversity issues of global environmental concern. In the particular case of this project, the link with the PACV is very important given the project's proven track record in working with CRDs. Without these incremental resources many of the proposed project activities would likely go unfunded in the face of the numerous competing demands on the country's limited budgetary resources and the current financially constrained donor environment.

The Bank can also add value through providing technical assistance for designing and implementing coastal and biodiversity projects that draw on the worldwide experience gained through management of its growing portfolio. The Bank has considerable experience to offer in institution and capacity building, be it for coastal management or environmental and social protection mechanisms, and its environmental safeguards are recognized as setting international standards. In addition, the Bank has recognized the value community based approaches as key to the success of any activity in the rural space.

E. Issues Requiring Special Attention

1. Economic

☒ Summarize issues below ☐ To be defined ☐ None

Economic evaluation methodology:

○ Cost benefit
○ Cost effectiveness
● Incremental Cost
○ Other (specify)

Baseline Scenario

The baseline scenario includes a series of multi- and bi-lateral donor and government financed activities along the coastal zone, from which limited resources would be funnelled towards marine and coastal zone biodiversity and ecosystem management related activities. Currently, there is no national multisectoral entity in place to guide sustainable coastal zone management in Guinea. Although Guinea has promoted the designation of six Ramsar sites in the coastal zone, within the current context, nonexistent national coordination of relevant efforts in sustainable coastal management, in additional to insufficient planning and knowledge of integrated coastal zone management makes it unlikely that within the existing poverty and shortcomings of the legislative and institutional framework, any national or regional relevant program will have a significant geographic and long lasting impact. Hence, under this Baseline Scenario, continued steadily growing pressure resulting from the various root causes, will continue to threaten the long term condition of the valuable biodiversity and ecosystems of the coastal zone.

Benefits under the Baseline Scenario

Under the baseline, the majority of expenditures will target poverty reduction activities in coastal communities. While the baseline provides minimal support to the management of the coastal resources, the interventions fall short of developing a fully integrated plan for the sustainable management of the coastal zone resources. In particular, the baseline activities do not specifically provide a viable option for

conserving the fragile and critical ecosystems located in the coastal wetlands. There will not be any attempt to invest in the preservation of biodiversity-rich niches in the coastal wetlands and in the protection of the fragile habitats that support these biodiversity resources.

The current planned investment of the baseline projects will not ensure the protection of globally significant biodiversity resources at the project target sites. Under the most optimistic conditions, the baseline may result in the creation of a protected area along the coast, and may ensure some, albeit short-term, safeguarding of natural resources and biodiversity assets. It is unlikely that in the baseline situation, the decline of biodiversity could be reversed and the livelihood of resource-dependent coastal communities enhanced through better resource management.

GEF Alternative Scenario

The objective of the proposed GEF Alternative is to promote and implement an integrated approach to the conservation and sustainable use of globally important biological resources in coastal areas and assist communities in and around priority areas to plan, implement and maintain environmentally sustainable and socially inclusive alternative livelihoods options. To achieve this objective, while developing continuity and sustainability, the program would build on relevant programs in place and/or under development, enabling collaboration and coordination of activities and databanks within the broader context of multisectoral marine and coastal biodiversity and ecosystem management. The project will enable the development of a multisectoral strategy taking into account the multitude of root causes at working in declining marine and coastal resources.

To cope with the overall constraints of rural poverty and the multitude of sectors involved in marine and coastal zone management, the project will build significantly on the existing institutional setting, community-driven approach and financial tools at work through the PACV. Using the PACV's experience in participatory community development, local capacity building activities will be geared towards strengthening local communities' abilities to develop and implement ecologically sound management practices of marine and coastal resources. The project will also work to strengthen the national monitoring and evaluation capacity established by OGM, PEG and AGIR.

The total incremental cost of the GEF Alternative amounts to US$5.0 million.

Benefits under GEF Alternative Scenario

The project would directly and indirectly address identified root causes to the threats. This GEF supported program will support sound management of upstream areas impacting prioritized biodiversity hotspots in the coastal zone. It will result in an increase of protected areas of globally prioritized valuable biodiversity and ecosystems through the establishment of at least one protected area. Additionally, the project will integrate lessons learned in the broader national marine and coastal zone management strategy, seeking long-term ecological and social sustainability.

2. Financial

☒ Summarize issues below ☐ To be defined ☐ None

One important aspect is to leverage sufficient resources by collaborating with other projects already active in the zone. To date, positive relationships have been established with the French Cooperation, USAID and the European Union who have both expressed interest in establishing a mechanism to prevent duplication of efforts and harmonize implementation procedures. During the preparation process other potential partners will be identified and mechanisms of collaboration defined. In particular, this project would seek to enter into contractual arrangements with other projects and international NGOs where synergies between

activities can be expected.

3. Technical

☒ Summarize issues below ☐ To be defined ☐ None

For many of the problems evoked above, technical solutions exist. Solar drying of salt or sell wood consuming ways of smoking fish exist and have been successfully tested. Improved ways to increase yields and maintain soil fertility of rice fields have been known in many countries and tested in the coastal zone. They are, however, not all suitable to the specifics of the region or have a need to be adapted to social circumstances as landowners are often absent or work through proxies. Where they are absent, local populations may be leery to invest in improvements because the landowner may return and reclaim the land or the landowner may not agree with proposals which would not maximize his rent income in the short-term. The technologies may also yield products that are less desired by consumers (e.g., solar drying of salt). During the preparation process particular attention will be placed on the identification of appropriate technologies in collaboration with all stakeholders and not just those living in the zone, to prevent well-intentioned activities that fail.

The technical studies required for project preparation include: (i) eco-regional representation and priority setting exercises to select candidate zones for the creation of CCAs (component 1); (ii) Institutional and legal framework. (component 1 and 2) for marine protected areas, (iii) review of current income-generation activities in coastal zone; (iv) review of lessons learned in sub-region related to similar projects; iv) indigenous strategy for the project and other relevant studies.

4. Institutional

Organization	Responsibility
Government (local, national) MMGE, MAE, MP, MF	Provide policy, oversight, guidance; enforce compliance; ensure functional institutions; implementation of agreements; conventions and protocols; participate in project planning, development and implementation, project articulation in line with national policies and priorities, project funding mobilization and M&E
Communities (fishermen, farmers, pastoralists)	Primary natural resource managers, adopt environmental-friendly and sustainable natural resource management practices and techniques, Participate in project preparation and development, M&E and resource mobilization at local level (human and financial)
NGOs (international, national, local)	Promote public awareness, sensitization, community and resource mobilization, capacity building and skill sharing, research and advocacy, networking, m&e
Private sector (mining, tourism)	Compliance with regulations, co-financing and resource mobilization, capacity building,
Donor agencies	Compliment local, national and sub-regional efforts, co-financing and resource mobiliation, capacity building, participate in project development and implementation and M&E (GIS)

Program design was initiated by the GEF focal point in Guinea, in consultation with the various national directorates, including the National Environmental Directorate (*Direction Nationale pour l'Environnement*) (see Appendix 4). This program was also drawn up in cooperation with the team responsible for identifying possible interventions for the *Fonds Français pour l'Environnement* (FFEM) in the coastal zone (Phase 2 of an observatory scheme for the mangroves).

The program's philosophy is completely in line with the Guinea Government's current decentralization policy. The Government seeks to make local actors responsible for the management of territorial collectivities and for a growing number of functions, including the management of collective spaces.

The program adopts a synergistic approach to the various institutions, NGOs and professional organizations dealing with natural resource management and the preservation of biodiversity in Guinean coastal ecosystems, such as: CNSH-B; the Ministry of Fisheries; the Ministry of Agriculture and Livestock and its national directorates (i.e., water and forestry, rural engineering, research, extension, etc.); the Ministry of Mining, Geology and the Environment; the Center for Environmental Studies and Research (*Centre d'Etudes et de Recherches en Environnement*, CERE); the Institute for Environmental Research (*Institut de Recherche Environnemental*); the Center for Education on the Environment and Development (*Centre d'Education à l'Environnement et au Développement*, CEED), etc.

National institutions will help provide expertise and, to the greatest extent possible, meeting spaces, offices and necessary logistical support. Research institutions and universities may also contribute additional technical and scientific expertise. Local public services and field operators will participate in the debates. Local actors and elected officials will have a preponderant voice in the definition of action plans. The Government will help create a website to help disseminate information, mobilize additional resources and foster the exchange of ideas with other parts of the world.

4.1 Executing agencies:

As part of project preparation, the capacity of the CNSH-B and the Ministry of Planning to implement the different project activities would be evaluated. During design particular attention will be placed on financial management capacity and procurement in order to avoid implementation delays.

4.2 Project management:

Overall project coordination will be carried out by the CP within the Ministry of Plan. Capacity within this Ministry is lacking and support would be provided to assist the Ministry. In order to minimize dependence on limited capacities, the different activities are being implemented by those agencies who have the strongest capacity to do so and under whose mandate the activity normally would have fallen.

4.3 Procurement issues:

Procurement would be handled by existing staff in the PACV and the CNSH-B using an adapted version of PACV's present procurement manual to reflect recent changes in procurement guidelines. Most procurement would consist of preparing contracts with partner institutions. The project would only finance incremental costs and equipment. Procurement of sub-projects by beneficiaries would follow simplified procurement guidelines.

4.4 Financial management issues:

Financial management is not expected to be an issue during project implementation. The parent project has a well functioning financial management system that has been audited several times and strengthened accordingly. CNSHB's capacity would be assessed but is unlikely to pose a problem.

5. Environmental

5.1 Summarize significant environmental issues and objectives and identify key stakeholders. If the issues are still to be determined, describe current or planned efforts to do so.

A detailed baseline study is planned for January/February 2004, which would supplement existing smaller studies to provide in-depth information on the specific sites and the populations living there.

5.2 Environmental category and justification/rationale for category rating: **B - Partial Assessment**

Environmental Policy OP 4.01, BP 4.01. The subprojects in and around marine protected areas would support sustainable activities with minimum environmental impact under Component 3. These activities are meant to strengthen the conservation activities of the protected areas, and would be identified in the local development plans and the management plans of the MPAs. Eligibility criteria will be spelled out in the PACV's adapted FIL manual. The required management plans shall include a zoning plan that takes into account the ecological fragility and biological importance of different zones within the protected area and spells out the uses permitted within each zone.

5.3 For Category A and B projects, timeline and status of EA

EA start-up date: February 2004
Date of first EA draft: April 2004
Expected date of final draft: May 2004

5.4 Determine whether an environmental management plan (EMP) will be required and its overall scope, relationship to the legal documents, and implementation responsibilities. For Category B projects for IDA funding, determine whether a separate EA report is required. What institutional arrangements are proposed for developing and handling the EMP?

The LIF is demand driven, hence it is impossible to predict in advance what the impact will be of the project. An environmental mitigation plan will be developed geared towards the specific types of eligible microprojects proposed. In general, none of the activities eligible under the project are expected to have a negative impact.

5.5 How will stakeholders be consulted at the stage of (a) environmental screening and (b) draft EA report on the environmental impacts and proposed EMP?

Stakeholders will be extensively consulted throughout the process to ensure appropriate inclusion of their concerns and buy-in of proposed measures. Local validation sessions will be held prior to adoption of the final document.

5.6 Are mechanisms being considered to monitor and measure the impact of the project on the environment? Will the indicators reflect the objectives and results of the EMP section of the EA?

Two mechanisms are considered: detailed impact studies every two years and periodic technical audits. Both will specifically evaluate the environmental impact of the projet's activities to enable early adjustments.

6. Social

6.1 Summarize key social issues arising out of project objectives, and the project's planned social development outcomes. If the issues are still to be determined, describe current or planned efforts to do so.

There are no negative social issues expected from the project. A detailed baseline study is planned for January/February 2004, which would supplement existing smaller studies to provide in-depth information on the specific sites and the populations living there. The project activities do not involve, directly or indirectly, resettlement of populations.

6.2 Participatory Approach: How will key stakeholders participate in the project?

Local community involvement is critical for the success of the project and the MPA. Activities during

preparation include information and communication sessions. Project start-up activities would include training, field visits, village/community meetings and workshops at the project target sites.

6.3 How does the project involve consultations or collaboration with NGOs or other civil society organizations?

International and local NGOs, representatives of groups of hunters, fishermen, etc., in the case of the protected areas. Preparation phase: preparation will be conducted in collaboration with the before mentionned groups. Implementation phase: The same groups will be involved in the implementation as part of an extension of project preparation activities.

6.4 What institutional arrangements are planned to ensure the project achieves its social development outcomes?

The project will develop a public involvement plan as part of the preparation. It will be based on a detailed social assessment for the CCA site to identify the various community groups and in particular the key vulnerable ones. It will put in place measures to prevent social exclusion and work toward the empowerment of all groups so as to increase their capacity to manage the resources of the selected intervention areas.

6.5 What mechanisms are proposed to monitor and measure project performance in terms of social development outcomes? If unknown at this stage, please indicate TBD.

Project impact studies will include social indicators, which are undergoing testing at the present time.

7. Safeguard Policies

7.1 Do any of the following safeguard policies apply to the project?

Policy	Applicability
Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)	● Yes ○ No ○ TBD
Natural Habitats (OP 4.04, BP 4.04, GP 4.04)	● Yes ○ No ○ TBD
Forestry (OP 4.36, GP 4.36)	○ Yes ● No ○ TBD
Pest Management (OP 4.09)	○ Yes ● No ○ TBD
Cultural Property (OPN 11.03)	○ Yes ● No ○ TBD
Indigenous Peoples (OD 4.20)	○ Yes ● No ○ TBD
Involuntary Resettlement (OP/BP 4.12)	○ Yes ● No ○ TBD
Safety of Dams (OP 4.37, BP 4.37)	○ Yes ● No ○ TBD
Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)	○ Yes ● No ○ TBD
Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)*	○ Yes ● No ○ TBD

7.2 Project Compliance

(a) Describe provisions made by the project to ensure compliance with safeguard policies which are applicable.

Describe provisions made by the project to ensure compliance with safeguard policies which are applicable.
See EA section above.

(b) If application is still to be determined, describe current or planned efforts to make a determination.

If application is still to be determined, describe current or planned efforts to make a determination.
N.A.

8. Business Policies

8.1 Check applicable items:

☐ _ Financing of recurrent costs **(OMS 10.02)**
☐ _ Cost sharing above country 3-yr average **(OP 6.30, BP 6.30, GP 6.30)**
☐ _ Retroactive financing above normal limit **(OP 12.10, BP 12.10, GP 12.10)**
☐ _ Financial management **(OP 10.02, BP 10.02)**
☒ _ Involvement of NGOs **(GP 14.70)**

8.2 For business policies checked above, describe issue(s) involved.
There are no particular issues involved in the participation of the international and local NGOs in project preparation. The international NGOs have satuisfactory past working relationships with the Bank and their participation will only enhance the technical soundness of the project. Local NGOs will have a weaker capacity and their participation will be evaluated in that light.

F. Sustainability and Risks

1. Sustainability:

Sustainability is a central theme of the proposed project, which aims to strengthen management of the coastal zone. Guinea has recognized that coastal and marine biodiversity concerns cannot be addressed in isolation, and will be affected by broader environmental and natural resource management decisions in and outside the coastal zone. The project will therefore also seek to establish a broader legal and institutional framework, primarily in the form of environmental assessment regulations and harmonization of legislation, to ensure the judicious management of environmental and social factors and thus promote adoption of a sustainable economic development path. Moreover, the project will be firmly embedded in long-term sub-regional efforts (see PRCM framework). Finally, the broader approach to local capacity building and menu of micro-projects eligible for funding under the project, which will be tested in 10-20 CRDs in the coastal zone, will be mainstreamed by PACV in its approach following successful testing, ensuring replication and over a larger area and sustainability beyond the project's implementation period.

Sustainability elements are:
Targeted capacity building: Project design emphasizes human resource capacity building as a key aspect to the sustainability of project objectives. Human resource capacity building is a longer term process, the project will contribute to attaining this long-term goal by: (i) supporting specific, targeted training activities for leaders in local communities; (ii) empowering local communities to participate in sustainable exploitation of their environment; and (iii) increasing stakeholder capacity to jointly plan, manage and monitor biodiversity conservation and sustainable use of the coastal zone, and environmental impact assessment processes more broadly.

Alternative livelihood options for communities: The project seeks to test and develop alternative livelihood strategies that will promote sustainable use of the local resource base. The LIF mechanism itself is not designed to be sustainable in the absence of follow-on funding, however, it is designed to help communities establish a minimum basis from which to escape the poverty trap which until presently is stifling local development. The reasons underpinning this decision include: (i) the need to learn more about how best to work with communities and local resource users, and what type of alternative livelihood options exist before trying to fully institutionalize any one mechanism; and (ii) sustainable use of natural resources falls within a much broader rural development and natural resource management approach.

Multi-sectoral institutional framework: A multidisciplinary team will also be established, through inter-institutional partnerships, to facilitate the bringing together of scientific and technical skills with public authorities for the purpose of disseminating knowledge and practices for the conservation and

upholding of the coastal zone environment, and of disseminating the results to the country and the world community. It is hoped that the approach of combining the conservation of priority biodiversity sites with the improvement of socioeconomic conditions will give beneficiaries a better life, as well as the incentives and knowledge to preserve their local environment. In this context, it will be essential to develop a national coastal zone strategy for Guinea. Since the proposed project implies a new approach in Guinea to sustainable coastal and marine development around Ramsar sites, it is expected that the lessons learned will in the future be mainstreamed into other potential protected areas so as to lead to a wider coverage and network.

Participation: The adoption of participatory planning mechanisms and strategic partnerships with stakeholders, as well as social assessments and monitoring of conditions ensuring social sustainability of the Project. Further, the project support the establishment of partnerships with other public programs and civil society, together with other national and international institutions, to assure a more comprehensive approach to the root causes of biodiversity loss.

Alternative financing for protected areas: The project will fund studies to determine alternative approaches to funding newly established protected areas other than from the Government budget (see also component 2, page 19).

1a. Replicability:

The project has been designed according to the country's relatively weak human resource, institutional and financial capacity and provides for piloting, testing, evaluating and adapting before scaling-up.

2. Critical Risks (reflecting the failure of critical assumptions found in the fourth column of Annex 1):

Risk mitigation measures include:

- Complementarity (expected policy changes and availability of bilateral and other sources of finance) to AGIR, PRCM, OGM, etc.
- Protected area is large enough and the practice of sustainable use of resources in surrounding productive landscape is widespread enough to ensure that the most threatened and endangered components of biodiversity will be protected
- Absorptive capacity exists to implement GEF activity and all other activities necessary for protecting the ecosystem
- Use of lessons learned
- Local communities: ensure that local communities accept and respect boundaries of conservation units and the limits imposed on biological resource extraction, scaling up and expanding successful community development activities, encouraging active participation of local communities, NGOs and incorporating knowledge of local and indigenous communities.

Risk	Risk Rating	Risk Mitigation Measure
From Outputs to Objective Effective implementation of national biodiversity conservation strategies as an integral part of the national coastal zone development strategy	S	To prevent short-term rent seeking economic and political interests interfering with the development, adoption and implementation of a sustainable development strategy, the project will seek a wide buy-in from international donors and NGOs that would be supportive of adjusting their project based interventions to wider program based interventions in support of

		the proposed strategy.
Good governance practices throughout project implementation.	M	Financial management and procurement will be entrusted to agencies experienced in this work only.
Stakeholders are convinced that economic interests can coincide with sustainable NRM.	M	The package of technologies and support will have sufficient incentives to ensure positive economic returns tp stakeholders.
Sufficient empowerment of communities to participate in project activities.	M	The project will work primarily with CRDs that have a proven track record with the PACV
Complementarity between national and regional approaches to MPAs and adequate support from international partners.	M	Close linkages will be established with international NGOs and regional programs during preparation.
From Components to Outputs		
Environmental priorities can be mainstreamed into a viable and politically acceptable multi-sectoral strategy.	S	The project will unambiguously present for each of the different priorities the medium and long-term costs of inaction and the benefits to be derived from the proposed strategy.
Availability of sufficient resources to implement the project	S	Government counterpart funds will be sought upfront and competition for scarce local resources will be minimized.
Viable options to replace destructive behaviour are available.	M	Alternatives from other countries will be tested and adapted to the Guinean context during project preparation to ensure a minimum mix of options is available at project start-up.
Overall Risk Rating	S	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N(Negligible or Low Risk)

G. Project Preparation and Processing

1. Has a project preparation plan been agreed with the borrower (see Annex 2 to this form)?

☒ Yes - date submitted: 10/01/2003 ☐ No - date expected:

A PDF-B in the amount of US$350,000 was approved by the GEF on December 18, 2000.

2. Advice/consultation outside country department:

☒ Within the Bank: ENV

☒ Other development agencies: The French Cooperation in Guinea, the European Union representative in Guinea

☒ External Review Peter Burberry, STAP reviewer

3. Composition of Task Team (see Annex 2):

Dirk Nicolaas Prevoo, AFTS4
Suzanne Piriou-Sall, AFTS4
Nina Doetinchem, AFTS4
Joseph Ellong, AFTS4
Bella Lelouma Diallo, AFTFM
Mathieu Meguhe, AFTPC
Gabriele Rechbauer, consultant
Susanne Leloup, consultant

4. Quality Assurance Arrangements (see Annex 2):

PCD Review in January 2004
PAD Review in May 2004

Lead advisor for the project: Claudia Sobrevila

5. Management Decisions:

Issue	Action/Decision	Responsibility
PCD Review	Expected to go ahead on December 31, 2003	TTL, World Bank

Total Preparation Budget: (US$000) 350,000 **Bank Budget:** $200,000 (BB-GEF) **Trust Fund:** US$350,000 (PDF-B)
Cost to Date: (US$000) (US$15,000 from PDF-B and US$ from BB-GEF)
☐ **GO** ☐ **NO GO** **Further Review** [Expected Date] 12/31/2003

Dirk Nicolaas Prevoo	Mary A. Barton-Dock	Mamadou Dia
Team Leader	**Sector Manager**	**Country Director**

Annex 1: Project Design Summary

GUINEA: Coastal Marine and Biodiversity Management

Hierarchy of Objectives	Key Performance Indicators	Data Collection Strategy	Critical Assumptions
Sector-related CAS Goal: Environmentally sustainable economic growth	**Sector Indicators:** Environmental degradation stopped and possibly reversed	**Sector/ country reports:** Policy Letter - Formally adapted strategies	**(from Goal to Bank Mission)** Environmental concerns are reflected in development strategies and mainstreamed in activities
GEF Operational Program: OP#2 Coastal, Marine and Freshwater Ecosystems	**Outcome / Impact Indicators:** Land surface under improved management conservation (minimum ~135,000 ha; potentially ~230,000 ha) Productive land in and around protected areas (buffer zones) cultivating sustainable technologies (50,000 ha) Positive changes baseline for key species indicators and water quality (in project sites) Decline or at worst, maintenance of the level of presence of key alien species	 International Convention on Biodiversity Implementation Progress Reports. Baseline ecological and social surveys within and around selected sites Subsequent bi-annual follow up surveys (indicators undergoing testing) Reports of international NGOs such as WWF, IUCN, CI and Wetlands International	 GOG effectively implements national biodiversity conservation strategies as an integral part of its development strategy. Good governance is implemented Successful implementation of decentralization process
Global Objective: Promote rational management of Guinea's coastal biodiversity for both conservation and sustainable development ends, with a particular emphasis on assisting communities in and around these priority areas to plan, implement and maintain environmentally sustainable and socially inclusive alternative livelihoods options	**Outcome / Impact Indicators:** Identification, establishment and effective management of at least one protected area (85,000 ha) and one additional site's assessed (95,000 ha) and all preparatory work necessary for the creation of a protected area completed by year 4 of project implementation. Adoption of multisectoral, environmentally sustainable, development strategy for coastal zone. Institutionalized donor and stakeholder coordination and consultation of coastal zone	**Project reports:** Sites surveys Formal GoG adoption of strategy Formal minutes of meetings; annual progress reports	**(from Objective to Goal)** stakeholders from outside the zone can be convinced that their economic interests coincide with sustainable NRM Communities remain committed and are sufficiently empowered. Transboundary activities can complement national approach and convergence in

	management activities at the national and sub-regional level.		approaches of different projects can be achieved
	Changes in behavior of local population leading to reduced pressures on coastal natural resources and ecosystem function/processes maintained/improved. In particular 75% of CRDs include adapted natural resource use activities and have mainstreamed improved natural resources management activities in their local development plans	baseline and subsequent project impact studies, and detailed site surveys	appropriate interventions can be identified and capacities sufficiently strengthened.
	Effective local community involvement in protected area management.	WWF/World Bank Alliance Management effectiveness tool	Conflicts between short -and long-term interests can be resolved to the communities satisfaction
Output from each Component:	**Output Indicators:**	**Project reports:**	**(from Outputs to Objective)**
Component 1: establishment of one protected area in collaboration with stakeholders and international NGOs	formal creation of a site (85,000 ha) and all preliminary work completed on second site (95,000 ha) by year 4. Local communities involved in management of protected area	decree for formal establishment of one protected area and project progress reports Satisfactory function of stakeholders management committee as measured by WWF/World Bank tool kit	local communities and authorities at all levels remain strongly committed.
Coastal zone monitoring system in place	Key species indicators Water quality (sedimentation) Land use Socio-economic indicators (changes in household sources of revenues towards sustainable use of resources)	Annual and bi-annual impact reports on activities compiled by project beneficiaries and discussed in open forums	
Permanent and accessible repository on coastal zone information	Internet portal on coastal zone information by end of year 2 Availability of information in national languages for local populations	project progress reports	

Component 2: Improved collaboration between stakeholders at national and subregional levels.	Formalized consultation process at national and subregional level at least once each year starting in year 2.	Formal minutes of meetings signed off on by all participants.	Government is committed to coastal zone coordination.
Sectoral integration (integrated land-use and integrated community-development addressing livelihood issues in buffer zones)	Formal adoption of an environmentally sustainable multi-sectoral development strategy for the coastal zone by year 4 (developed through a participatory process).	Letter from Ministry of Finance regarding adoption of strategy.	Environmental priorities can be mainstreamed into sector strategies/policies.
Sustainable financing pilot scheme for protected areas	Detailed proposal of sustainable financing mechanism of protected areas agreed upon with Government in year 4	Formal request from Government for donor support to test the sustainable financing mechanism, financed by one or more donors.	Viable options for the Guinean context exist.
Component 3: Environmentally sustainable and socially inclusive alternative livelihoods.	Increased income security through diversification of economic activities away from unsustainable practices starting in year 2 (% of micro projects satisfactory implemented and income stream derived from these; reduction of local people involved in destructive activities)	Socio-economic and ecological surveys	Suitable alternatives to rent seeking exploitation can be found
Sustainable coastal, marine and freshwater management techniques in place.	Reduced pressure on natural ressources, stabilization of total area cultivated in project target sites, unsustainable exploitation practices (logging, poaching, etc.) by 20% by year 4, embankment stabilization and protection (# of kilometers); reduced run-off and polutants from human activities (10% by year 4)		
Component 4: Local stakeholders are enabled to plan, implement and monitor their own sustainable development plans.	60% of participating communities have included biodiversity conservation activities into their land management plans by year 2 and 75% by year 4; 40% of participating communities have satisfactorily implemented	project progress reports	Sufficient capacity can be built and maintained

	adapted natural resource use activities as defined in their local development plans and annual investment plans by year 2 and 75% by year 4; land management plans elaborated on a participatory basis starting in year 1; proof of involvement of relevant associations (fishermen, farmers, livestock holders, hunters, charcoal producers, etc.) in development of land use plans; and stakeholders agree on resource exploitation rules on a non-confrontational basis starting in year 2		
Component 5: Efficient management of project resources. Evaluation of project impact	Annual audits and management letters are satisfactory. Project M&E system provides the required information to evaluate project impact in a timely manner	Audit report and Bank SOE review Project reports	
Project Components / Sub-components:	**Inputs: (budget for each component)**	**Project reports:**	**(from Components to Outputs)**
1. Protection and Conservation of Coastal Ramsar Sites. 1.1.Protected Areas 1.2. Impact Monitoring and Evaluation	US$4.40 million (of which GEF US$1.65 million)	Semi-annual progress reports GIS based M&E tracking changes in land use, biodiversity, poverty profiles and adoption of new technologies.	Successful marriage of traditional customs and modern law
2. Institutional strengthening for integrated coastal zone management 2.1.Framework for sustainable coastal zone management 2.2. Coastal Zone Knowledge and Communications	US$2.30 million (of which GEF US$0.90 million)	Semi-annual progress reports	Government commitment. Use of lessons learned in sub-region. Ministry of Planning can be effective champion.
3. Local Investment Fund (LIF) 3.1.Village Investment Fund	US$5.20 million (of which GEF US$1.20 million)	Semi-annual progress reports	Technologies are cost-effective and acceptable.

(VIF) 3.2. Innovative Fund			
4. Support for local capacity building	US$4.35 million (of which GEF US$0.80 million)	Semi-annual Progress reports	Traditional authorities are cooperative Sufficient management capacity exists in communities
5. Project management and monitoring and evaluation	US$1.80 million (of which GEF US$0.8 million)	Semi-annual Progress reports	See PACV

Annex 2: Incremental Cost Analysis
GUINEA: Coastal Marine and Biodiversity Management

A. Context

Global Environmental Significance of Guinea's Coastal Zone

The global significance of the biodiversity of the coastal ecosystems of Guinea has been widely acknowledged. Within Guinea's coastal zone, six coastal wetlands have been designated as Ramsar sites (see Annex 4 of the Project Brief). These are in particular of international interest through their role as important refuge areas for water birds migrating between the Eurasian and African continents. Practically the entire coastline has been identified as a priority area for biodiversity conservation, as part of what is left of the Upper Guineas Forest International references testifying Guinea's coastal zone global biodiversity significance: "A Global Representative System of Marine Protected Areas (Great Barrier Reef Authority, World Bank, IUCN)", Global Marine Biological Diversity; International Conventions (Ramsar and World Heritage); UNEPs Regional Sea Programm; Conservation International.. Remaining patches of this forest are found along the West African coast from Guinea to Togo. Guinea's total area of mangroves constitutes one quarter of West Africa's total mangrove wetland –stretching from Senegal to northern Angola- the ecological function of which is closely intertwined with that of the upstream (e.g. coastal plateau) and down stream (continental sea shelf) ecosystems. Furthermore, Guinea's coastal zone represents a portion of a much larger international coastal and marine ecosystem, known as the Guinea Current. The Guinea Current is ranked among the world richest coastal and off-shore reserves in terms of fishery resources, oil and gas, precious minerals, its potential for eco-tourism and its functioning as important reservoir of marine and coastal biodiversity of global significance. The Guinea Current stretches along the Atlantic African coast from about Guinea Bissau to Angola. The particularity of the Guinea portion lies in the fact that it contains the widest part of the continental shelf of the Guinea Current, reaching 160 km at the northwestern border with Guinea Bissau. This part of the coastal zone barely experiences any upwelling from deeper waters. Upwelling usually drains sediment and nutrients that are brought in from the upstream inland waters to the coast towards the open sea. Hence, without much upwelling the coastal waters accumulate much more nutrients and therefore become very productive. In addition, the extreme irregularity of the mangrove dominated shoreline, harbors a multitude of niches along the land- water interface.

National Dependency on Natural Resources

Guinea is ranked among the poorest countries in the world. Its economy is almost entirely dependent on natural resources for income, labor, food, energy and healthcare as reflected in the following features:

- Mineral mining and agriculture represent the most important economic activities, providing employment to about 80% of total population.
- Agriculture is the dominant activity of the rural population while 30% of the rural population is practicing livestock holding.
- Fish consumption provides 40% of animal protein intake.
- Household energy depends for 99% on wood fuels.
- Health care system depends for 80% on traditional medicine practices, which heavily rely on native flora and fauna species.

Threat and Root Causes for the Coastal Zone

The main threats to the Guinean coastal zone are conversion, fragmentation and alteration of natural habitats. Growing pressure on the environment coming from human-induced activities is either threatening or actively converting, fragmenting and/or altering natural habitats all over the country, including biodiversity hotspots of global interest. Hence, in the coastal zone, this is of impact on the condition of remnants of the former Upper Guinean Forests, including the classified Forests, and the six designated, currently unprotected, Ramsar Sites.

The root causes of these threats stem from various influences, such as poverty, population pressure, urbanization, wood collection, cropping, livestock holding, hunting, fishing, harvesting of native plant species, water pollution and water flow changes due to land degradation, and weak legislative and institutional frameworks. These root causes and corresponding project mitigating activities are summarized in the following table. More detail on these can be found in Annex 10 to the Project Brief.

Table 1: Poverty and Global Environment Linkages in Coastal zone, threats, root causes and project activities.

Poverty and Global Environment Linkages in Coastal Zone	Threats	Root Causes	Project Activities
The globally valued biodiversity of the coastal zone represent a significant portion of the natural resources on which in particular the poorest part of the residing population heavily depends for income, labour, food, water, shelter and health care.	Conversion, fragmentation and alteration of globally and nationally valued biodiversity of the remnants of the Upper Guinea Forest and 6 Ramsar Sites:	· Fast growing population: 292% between 1963 and 1996 · Concentrated in urban centers reaching densities of over 400 h/km2 versus less than 20 h/km2 in some rural areas · Uncontrolled expansion of unsustainable wood cutting, cropping, livestock holding, fishing, hunting and harvesting of native species · Lack of waste and sanitation management. · In and off-site land degradation and waterflow changes · Ineffective legal	Through linking with existing relevant initiatives such as PACV, AGIR, OGM, PEG and coordination with other relevant programs, CZMP aims to contribute to the preservation of the globally valued biodiversity of the Coastal zone by: · Supporting the establishment of Marine Protected Area in the zone while measuring the socio-economic and ecological impact. · Supporting institutional capacity and inter-sectoral collaboration, communication, and data gathering and exchange to facilitate the implementation of sustainable coastal zone management.

		and institutional framework and capacity to protect the condition of valued natural habitats, including biodiversity. · Lack of inter-sectoral collaboration and databank sharing and exchange mechanisms.	· Establishing Local Investment Funds in and around potentially protected sites to support activities, which preserve biodiversity. · Raise local awareness for the need to preserve their natural resources and to build capacity to implement and manage relevant activities. · Support management and M&E of the project activities

B. Global Environmental Objective

The global environmental objective of the proposed GEF alternative is to strengthen the conservation of globally and nationally significant habitats and species in Guinea's coastal zone. The project will work with national and regional partners to promote and implement an integrated approach to the conservation and sustainable use of globally important biological resources in Guinea's coastal zone.

The priority activities of the proposed project are consistent with the country's CAS and NBSAP, and focus on the conservation of biodiversity-rich niches located in sites designated as globally significant by Ramsar. The proposed project is also responds to the following two targets adopted for Oceans, Coasts and Islands at the World Summit on Sustainable Development (WSSD) in Johannesburg 2002:

Conservation of biodiversity:

· develop and facilitate the use of diverse approaches and tools, and

· the establishment of protected areas consistent with international law and based on scientific information, including representative networks by 2012.

The proposed project thus reflects national, sub-regional and international priorities for coastal and marine management as well as for biodiversity conservation. The objectives will be achieved through (i) the development of at least one protected area in the coastal zone, which includes key biodiversity resources specific to the coastal ecosystems of Guinea; (ii) the development of a multi-sectoral environmentally sustainable development strategy for the coastal zone; and (iii) support to the population of approximately 10-20 Rural Development Communities living within and around the project intervention areas.

C. Baseline Scenario

The baseline scenario includes a series of multi- and bi-lateral donor and government financed activities along the coastal zone, from which limited resources would be funnelled towards marine and coastal zone biodiversity and ecosystem management related activities. Currently, there is no national multisectoral entity in place to guide sustainable coastal zone management in Guinea.

Although Guinea has promoted the designation of six Ramsar sites in the coastal zone, within the current context, nonexistent national coordination of relevant efforts in sustainable coastal management, in additional to insufficient planning and knowledge of integrated coastal zone management makes it unlikely

that within the existing poverty and shortcomings of the legislative and institutional framework, any national or regional relevant program will have a significant geographic and long lasting impact. Hence, under this Baseline Scenario, continued steadily growing pressure resulting from the various root causes (see section A), will continue to threaten the long term condition of the valuable biodiversity and ecosystems of the coastal zone.

Cost

Under the project, it is expected that the government of Guinea and interested donors will invest approximately US$13 million in projects related to biodiversity conservation and natural resource management of the coastal zone in the project area over the project period. The estimation of the costs of the Baseline Scenario provided below are based on consideration of only those parts of budgets of relevant national entities and internationally supported programs at work, which would be allocated to marine and coastal zone biodiversity and ecosystem management related activities.

The following table presents the estimated distribution of the costs involved per national entity and internationally supported program per project component. Table 4 details these baseline projects and percentages of budgets included in the baseline.

Table 2. Baseline Scenario Costs (US$ million)

Component	**Protection & conservation of coastal ramsar sites**	**Institutional strengthening for integrated coastal zone management**	**Local Investment Fund**	**Support for local development**	**Project management; monitoring & evaluation**	**Total**
Donor/Project*						
Government	0.4	0.6				1.00
CRDs			0.5	0.05		0.55
PACVII			3.0	3.0	1.0	7.00
AGIR	0.5	0.5	0.5	0.5		2.00
OGM	1.5					1.50
PEG	0.5					0.50
PRCM		0.5				0.50
Total	**2.9**	**1.6**	**4.0**	**3.55**	**1.0**	**13.05**

**See Table 4 for details on baseline projects.*

Benefits

Under the baseline, the majority of expenditures will target poverty reduction activities in coastal communities. While the baseline provides minimal support to the management of the coastal resources, the interventions fall short of developing a fully integrated plan for the sustainable management of the coastal zone resources. In particular, the baseline activities do not specifically provide a viable option for conserving the fragile and critical ecosystems located in the coastal wetlands. There will not be any attempt to invest in the preservation of biodiversity-rich niches in the coastal wetlands and in the protection of the fragile habitats that support these biodiversity resources.

The current planned investment of the baseline projects will not ensure the protection of globally significant

biodiversity resources at the project target sites. Under the most optimistic conditions, the baseline may result in the creation of a protected area along the coast, and may ensure some, albeit short-term, safeguarding of natural resources and biodiversity assets. It is unlikely that in the baseline situation, the decline of biodiversity could be reversed and the livelihood of resource-dependent coastal communities enhanced through better resource management.

D. GEF Alternative Scenario

Strategic Approach

The objective of the proposed GEF Alternative is to promote and implement an integrated approach to the conservation and sustainable use of globally important biological resources in coastal areas and assist communities in and around priority areas to plan, implement and maintain environmentally sustainable and socially inclusive alternative livelihoods options.

To achieve this objective, while developing continuity and sustainability, the program would build on relevant programs in place and/or under development, enabling collaboration and coordination of activities and databanks within the broader context of multisectoral marine and coastal biodiversity and ecosystem management. The project will enable the development of a multisectoral strategy taking into account the multitude of root causes at working in declining marine and coastal resources.

To cope with the overall constraints of rural poverty and the multitude of sectors involved in marine and coastal zone management, the project will build significantly on the existing institutional setting, community-driven approach and financial tools at work through the PACV. Using the PACV's experience in participatory community development, local capacity building activities will be geared towards strengthening local communities' abilities to develop and implement ecologically sound management practices of marine and coastal resources. The project will also work to strengthen the national monitoring and evaluation capacity established by OGM, PEG and AGIR.

Geographic Scope

Guinea has not yet established formally protected areas in its coastal zone, as is the case in neighboring Guinea-Bissau with which the coastal zone shares many characteristics. However, six Ramsar sites in the coastal zone have been designated in 1993 as wetlands of international importance because of their unique biodiversity. These sites are: Ile Alcatraz, Iles Tristao, Rio Pongo, Ile Blanche, Konkouré and Rio Kapatchez . The GEF Alternative will be implemented within the watershed of Guinea's coastal zone, with a particular focus on creating a protected area which includes Iles Tristao and Ile Alcatraz, and setting the basis for eventual establishment of Rio Pongo as a protected area. The main decision points were the transboundary location with Guinea-Bissau, global environmental importance for reproduction of fish resources and mangrove forests and the occurrence of threatened species. Additional research, information collection and analysis activities to assess the potential of additional sites will be included in the project.

In building upon on-going work and institutions, the program will facilitate the establishment of the first protected area in the coastal zone under national jurisdiction in the joint area of the two Ramsar sites of Iles Tristaos and Ile Alcatraz. This site was identified by the PRCM as the priority site for a protected area. This exercise will be used as a pilot case for the development of a toolbox for the establishment and impact evaluation of protected areas and for the development of a national geographic scaling-up strategy for the establishment of protected areas within the context of a broader marine and coastal zone biodiversity and

ecosystem management strategy.

Technical Composition

The total incremental cost of the GEF Alternative amounts to US$5.0 million (see Incremental Cost Matrix below), with investments in the following components:

1. Protection and conservation of coastal Ramsar Sites: Guinea's coastal zone has been identified as one of the West African biodiversity hotspots, however, until now, Guinea is the only country in the sub-region that has not established a protected area to conserve and enhance globally important biodiversity. The government has committed itself to the creation of a protected area as part of a regional network initiative (PRCM). Therefore, the project, through this component, aims to provide the necessary strategic and operational tools and experiences to establish one protected area and lay the foundation for the eventual designation of a second protected area, through a participatory approach with concerned communities in the watersheds surrounding the target sites. This component will use lessons learned from other countries and initiatives in the sub-region to adapt them to the country and site-specific context.

GEF support to the project will only provide funding for the incremental costs of carrying out the activities directly related to the project, as the French Government is already funding a large part of the costs of the OGM.

2. Institutional strengthening for integrated coastal zone management: Targeted capacity building will be provided for stakeholders at national and local level. The specific objective of this component therefore seeks to strengthen the framework for integrated coastal zone management and the establishment of a coastal zone protected area network at the national and sub-regional level.

3. The Local Investment Fund: The LIF component of the PACV aims to stimulate local development and give the means to project beneficiaries to reduce dependencies on unsustainable natural resource exploitation by transferring grants directly to CRDs. The PACV LIF has two parts (windows): (a) a Village Investment Fund (VIF) which constitutes 95% of the component's funds, and (b) a regional (involving more than one CRD) Innovation Fund (IF) representing 5% of funding.

GEF support to this activity would in part augment resources available under the PACV in those CRDs where the populations activities directly impact the wetlands and areas of high biodiversity value. This is most likely achieved by selecting CRDs and communities sharing a common watershed with these sites. On this basis, the project is expected to intervene alongside the PACV in 20-25 CRDs in the coastal zone by year 4. The project will use the experience gained under the AGIR project to help guide pilot activities and to ensure that donor supported activities in the same watershed follow a coherent approach, even in areas that cross political boundaries.

4. Local Capacity Buildling: The objective of this component is to rationalize and operationalize the regulatory and institutional environment for local development. The component supports the following activities: (a) strengthen the capacity of CRDs to manage local development programs; (b) sensitizing and training elected local officials and CRD administrative and technical staff in the areas of local development government, planning, and financial management.

GEF incremental support to this component will focus on supporting communities in the coastal zone with training and tools to assist them in devising sustainable land management plans that specifically include biodiversity protection and sustainable use.

5. Project Management and Monitoring and Evaluation: The objective of this component is to ensure cost-effective, efficient and streamlined project implementation of the four other components. The project would provide incremental funding only to the implementing agencies.

The concerned national entities and internationally supported programs in the baseline scenario also represent the constituting primary partners of the GEF Alternative.

Benefits

The project would directly and indirectly address identified root causes to the threats mentioned under section A. This GEF supported program will support sound management of upstream areas impacting prioritized biodiversity hotspots in the coastal zone. It will result in an increase of protected areas of globally prioritized valuable biodiversity and ecosystems through the establishment of at least one Marine Protected Area. Additionally, the project will integrate lessons learned in the broader national marine and coastal zone management strategy, seeking long-term ecological and social sustainability.

Table 3. Incremental Cost Matrix

Component	Cost Category	Cost US$m	Domestic Benefits	Global Benefits
Protection and conservation of coastal Ramsar sites	Baseline	2.9	Potential establishment of one protected area, but timing uncertain.	Potential establishment of one protected area. Some reduction of impacts on coastal and marine ecosystems containing globally significant biodiversity.
	GEF Alternative	4.40	National experience will be gained with the establishment of at least one protected area in the coastal zone safeguarding natural resources of direct importance to the well-being of local communities. Multisectoral monitoring of socio-economic and biodiversity and ecosystem established for protected area(s) and of interest to residing and surrounding communities linked to larger scale multisectoral monitoring systems providing data for an evolving national marine and coastal zone management strategy.	Establishment of at least one protected area (85,000 ha) in the coastal zone safeguarding globally prioritized valuable biodiversity and ecosystems (see also box 1, Ramsar sites, in main text section B.2) Multisectoral monitoring of prioritized biodiversity hostpot and ecosystems in and around protected area(s) linked to larger scale multisectoral monitoring systems providing data for coastal zone management, with the possibility for expansion to a transboundary protected area. Improved conservation of globally significant coastal and marine biodiversity; removal of threats, and improved resource use practices communities, covering at least 50,000 ha.
	Incremental	1.50		
Institutional Strengthening	Baseline	1.60	Increased capacity of sectoral ministries to coordinate their interventions for	Limited improvement in the management of globally significant coastal and marine biodiversity

			development of coastal zone and sustainable use of resources. Socio-economic and biodiversity and ecosystem monitoring in the coastal zone will continue in a fragmented, localized and uncoordinated sectoral manner.	resources. Data on condition of prioritized biodiversity and ecosystems in the coastal zone will grow fragmentally.
	GEF Alternative	2.30	A multisectoral knowledge and databank exchange mechanism facilitating the evolving development of a national marine and coastal zone management strategy. A regulatory and institutional framework for coastal resources management is operational on national and local/regional level	The maintenance of the condition of globally prioritized marine and coastal biodiversity and ecosystems will be targeted in the creation and context of a national multisectoral marine and coastal zone strategy. Policies and regulations for mainstreaming coastal biodiversity into sectoral polices are in place. Coordinated multisectoral knowledge on the condition of globally prioritized marine and coastal biodiversity and ecosystems will become readily accessible. Inclusion of representatives of multisectoral entity responsible for guiding the management of marine and coastal zones in dialogues and planning of regional marine and coastal zone management strategy likely to lead to effective regional agreements and measures backed by national strategies.
	Incremental	.70		
LIF	Baseline	4.00	A limited number of local development plans in and surrounding the pilot site targeting sustainable use of	Limited reduction of impacts on coastal and marine ecosystems containing globally significant

			the marine and coastal natural resources.	biodiversity.
	GEF Alternative	5.20	A significant number of development plans in and around the pilot site, the first protected area, will target the ecological sustainable uses of the marine and coastal natural resources (50,000 ha will be sustainably managed and watersheds/riverbeds protected).	Improved basis for sustainable management of global biodiversity resources and opportunities for increased income earning opportunities that would reduce pressure on the protected area(s). Improved resource use practices by the surrounding communities (comprising ~50,000 ha) stemming from the adoption of alternative forms of development that improve livelihoods and conserve or enhance biodiversity. Maintenance of globally prioritized marine and coastal biodiversity hotspots and ecosystems.
	Incremental	1.20		
Local Capacity Building	Baseline	3.55	Local communities in and around pilot site will continue to develop and implement local development plans entailing mostly the construction of social infrastructures such as schools and health care facilities.	Improved water and sanitation management conditions in globally prioritized marine and coastal biodiversity hotspots and ecosystems.
	GEF Alternative	4.35	Increase in the development and implementation of local development plans involving sustainable use of the marine and coastal zone natural resources by communities.	Significant capacity of communities developed to implement biodiversity-friendly resource use activities, leading to significant conservation of global environmental assets through sound management of priority area(s), conserving species and managing natural resources wisely.

				Substantial global environmental benefits will occur as a result of community-based sustainable use of marine and coastal zones, in particular in and around the prioritized biodiversity hotspots and ecosystems. Communities will understand and take part in national coastal zone /protected area management and use information available.
	Incremental	.80		
Project Management	Baseline	1.00	Short-term and localized biodiversity benefits achieved through the various relevant programs in place. Availability of M&E information used for activity and project guidance.	Minor short term and localized improved conditions of prioritized marine and coastal zone biodiversity and ecosystems may occur, mostly in the priority site for protected area(s).
	GEF Alternative	1.80	Integration of conservation issues into sectoral policies. Increased coordination among various partner programs involved in integrated marine and coastal zone management. Cross-sectoral M&E system in place assessing the condition of ecosystems as a whole, to guide integrated coastal zone management respecting national socio-economic and ecological interests.	Increased geographic coverage and longer term impact will facilitate safeguarding and/or improvement of the condition of globally prioritized marine and coastal biodiversity and ecosystems. Adequate information, including indicators is available to manage globally significant biodiversity resources. Substantial assessment tool established to guide integrated coastal zone management leading to significant global environmental benefits. Exchange of information and experience with neighboring

				countries. Publication and dissemination of best practice in community-based wetland and marine biodiversity conservation
	Incremental	.80		
Totals	Baseline	13.05		
	GEF Alternative	18.05		Establishment and enforcement of integrated coastal zone management plan. Increased area of globally significant biodiversity /wetlands of international importance under protection through the creation of at least one protected area. Efforts to conserve globally significant biodiversity are facilitated by effective legal protection. Donor coordination mechanism for interventions in the coastal zone. Support to rural communities to sustainably manage natural resources. Ecosystem, genetic and species diversity conserved.
	Incremental	5.00		

Hence, evaluated as such, the GEF increment of US$5 million represents 27.7 % of the total cost of the GEF Alternative. However, this result can be considered conservative in many ways since:

· Estimated re-allocated portions of primary partners are kept low.
· Potential input from the many potential partners, indicated in section Baseline Scenario, were not considered in the Baseline Scenario Costs.
· Value of many existing relevant databanks which are currently not readily accessible but will become accessible through the program are not accounted for.

Table 4. Baseline projects considered in incremental cost analysis

Project	Objective	Total Budget	% Calculated as Baseline	Baseline Amount (US$m)
Government	Salaries and facilities			1.0
Rural Development Communities (CRD)	Cash and in-kind contributions			0.55
Village Community Support Program (PACV-II)	Cofinanced by IDA, IFAD, ADF and AFD, the main objective of this program is to help reduce rural poverty through capacity-building at the level of all Rural Development Communities (CRD). This program is implemented in three phases of four years each. The first phase, which is currently phasing out, has three objectives: to (i) establish an effective and efficient mechanism for transferring public funds to local communities for the financing of prioritized rural community infrastructure; (ii) improve the regulatory, institutional and fiscal environment and develop local capacity for decentralized rural development; and (iii) rehabilitate and promote regular maintenance of infrastructure and rural roads.	IDA - $25.0 m phase II	35	7.0
Support to integrated natural resource management in the Niger and Gambia basins (AGIR)	This EU supported regional program involves community-based integrated natural resource management in five sites, involving activities such as biodiversity monitoring and preservation, watershed management and valorization of non-timber forest products. Two sites are entirely located in Guinea.	EU - $25.3 m	8	2.0
Guinea Maritime Oberservatory (OGM)	This AFD and French GEF supported program strengthens national capacity and knowledge while creating and using tools and methodologies to gather data and develop information management systems, including Geographic Information Systems, to monitor – with involvement of communities – (i) poverty; (ii) biodiversity and local management of biodiversity; (iii) rural production systems, farm and off-farm, land tenure issues; and (iv) adoption of modified	AFD / FGEF - $2.8m	18	1.50

	technologies in the Coastal Zone.			
Ecological fisheries in Guinea (PEG)	This EU and French Government supported national capacity building program focuses on the development and implementation of knowledge, tools, and methodologies to support ecologically sound monitoring and exploitation of the fishery resources of the Guinea marine and coastal ecosystems.	EU / GoF - $1.0m	50	0.50
Regional Program for the Conservation of the Marine and Coastal Zone of West Africa (PRCM)	This initiative seeks to support the preservation and sustainable use of the marine and coastal resources of West Africa. This program is particularly interested in the maintenance of the fishery resources and biodiversity through the establishment of a regional network of Marine Protected Areas.	IUCN/WWF/ FIBA/UNESCO / Wetlands Int'l - $5.0m	10	0.50
TOTAL:	**$13.05**			

Annex 3: STAP Roster Technical Review
GUINEA: Coastal Marine and Biodiversity Management

GUINEA: Coastal Marine and Biodiversity Management Project (CMBMP)

Overview:
The reviewer undertook a preliminary assessment of an earlier draft Project Concept Document and raised a number of issues with the Project Team that were intended to help strengthen the PCD and assist in the achievement of the stated objectives. In the main these have been addressed in the revised PCD.

However, there remains one critical issue that needs to be addressed more fully in the PCD. This concerns sustainability of the RAMSAR sites given the poor standards of soil and water management in the catchments in the coastal plateau. This is discussed in the section on Scientific and Technical Soundness of the Project:

STAP based on the GEF Evaluation criteria.

Key issues

1. Scientific and technical soundness of the project

Given the early stage of development of baseline information on the coastal systems it is to be expected that there may not be sufficient ecological and technical information available to give the project as sound a scientific base as would be desirable. Some important questions remain that will affect the implementation and possible success of project activities intended to conserve biodiversity. One example is whether the two RAMSAR sites can be conserved if major issues affecting hydrology and sediment budgets upstream from the coast are not effectively dealt with under the Programme d'Appui aux Communautes Villageoises (PAVC) and other projects that form the broader coastal management framework for the project.

The project documentation presents a comprehensive overview of the ecological, socio-economic and governance issues affecting the conservation of biodiversity associated with the coastal and marine ecosystems in Guinea, including six nominated RAMSAR sites. The PCD acknowledges the lack of detailed scientific information on the effects of human development pressures on the ecological linkages between the coastal plateau, marine wetlands and continental shelf components of the coastal zone. A number of specific issues are identified in the PCD that threaten equilibrium of the three main components of the coastal ecosystem (coastal plateau, salt water marshes and continental shelf), biological diversity and sustainable use of the coastal and marine areas and resources. One of the prominent issues is the poor land and water management in the coastal plateau with its dense drainage network. Based on experience elsewhere, this would make the RAMSAR sites in the estuaries downstream vulnerable to degradation

unless significant improvements are made in the management of human activities in the watersheds upstream.

This issue was raised by the reviewer and the Project Team incorporated the following sentence in response “Given the importance of the inter-linkages between the different ecological zones in the coastal area through a dense hydrological network, greatly improved management of the three main ecological zones is needed if the health and productivity of coastal and marine ecosystems and their related biodiversity are to be maintained." (page 12)

The PCD goers on to give emphasis to the use of an ecosystems approach to the improvement of the management of the priority RAMSAR sites at Iles Tristao/Alcatraz and Rio Pongo, both of which are estuarine complexes. However, the PCD does not really develop a strong management relationship between the RAMSAR sites and the catchments upstream. By concentrating efforts on the protected areas without a corresponding and effective effort within the broader catchment system, any short-term progress in local management within and immediately surrounding the 2 target sites would be very vulnerable to loss of sustainability resulting from a breakdown in coastal ecosystem functions caused by poor management upstream.

The project team clearly recognizes that the challenges of developing a robust program for sustainable coastal planning and management for the whole of the coastal zone in Guinea may have to be left to other initiatives. However, the reviewer believes that the project budget of $20 mullion would be sufficient to develop a project model that integrates improvements in land and water use management in the watersheds linked to the estuaries where the two target RAMSAR sites are located. This could well be more strongly integrated with the efforts within the PACV program and would provide a much more robust framework for sustainable management and transfer to other areas in the West African coast. This should be explored as it would strengthen the scientific and technical features of the project design.

The project design features a range of appropriate and integrated supporting measures that could be extended to the catchments associated with the two estuarine RAMSAR sites. These include: the development of alternative livelihoods, the village development fund, measures to strengthen the capacity of stakeholders to help plan for and implement sustainable use of the coastal ecosystems. This would provide important economic and social development tools to support the emphasis within the project on environmental linkages between the MPAs and the broader coastal ecosystem that should provide a comprehensive and technically sound basis for achieving the stated biodiversity conservation objectives.

The participative approach taken in the PCD should help ensure the achievement of the objectives of conserving biodiversity, promoting more sustainable forms of resources use and the successful identification and development of alternative livelihoods for local communities. The design recognizes the importance of developing both awareness of

conservation issues and active participation of communities and other local stakeholders in the development of effective biodiversity conservation initiatives.

The role of the private sector in the conservation of biodiversity could be better developed in the project design.

2. Identification of the global environmental benefits and/or drawbacks of the project

The national, West African and more global environmental benefits are clearly set out in the Strategic Context: Sections 1a and in Section 5.3. A key feature of the project is the development of a trans-boundary MPA for a series of ecosystem components shared by Guinea and Guinea-Bissau.

There is a risk that the efforts to improve the sustainability of the two target protected areas may be constrained by the lack of effective action in Guinea Bissau to maintain the functional ecological linkages between the wider coastal ecosystem and the island and estuarine ecosystems that help to sustain the planned trans-boundary protected area.

3. How the project fits within the context of the goals of GEF, as well as its operational strategies, program priorities, GEF Council guidance and the provisions of the relevant conventions

The project is designed to address the GEF Operational Strategy for the conservation of Biological Diversity. The project directly addresses the goals of the GEF Operational Program no. 2 through measures to strengthen the use of Marine Protected Areas to protect Coastal and Marine Ecosystems through situ conservation. The project also addresses Jakarta Mandate by supporting conservation and sustainable use of vulnerable marine habitats and species.

The project documentation sets out the measures taken to adhere to the COP guidance as follows:

- Basing wetland conservation and biodiversity conservation an ecosystem approach. The planned measures could be strengthen as suggested above;
- Involving local communities and resource users, and building on local knowledge,
- Strengthening community management for sustainable use or ecosystems and renewable resources
- Promotion of economic incentives that support the adoption of alternative livelihood opportunities;
- Strengthening local and national institutional capacity to address environmental issues through developing a sustainable institutional and legal framework for promoting biodiversity conservation and management, and giving emphasis to participatory models that devolve biodiversity decision-making and management to stakeholders at the local level as per the national governments policies;
- The project also seeks to strengthen inter-institutional, and multiple stakeholder forums such as the national-level Biodiversity Committee, discussion and

implementation fora in pilot areas, and fisheries committees as a means of promoting integration of biodiversity into fisheries policies and resources management decisions.

All of the above measures could be extended to specific watersheds in the Coastal Plateau to help reduce the negative impacts on the RAMSAR sites downstream.

4. Regional context

The project addresses issues of importance to biological diversity conservation within the surrounding region by focusing on sites that are representative of other parts of West Africa and contribute to the overall biodiversity of the region. The project seeks to develop effective linkages with other countries in the sub-region, especially with Guinea-Bissau and Senegal. One example is the plan to develop trans-boundary management arrangements for one protected area whose ecosystems are common to and shared by Guinea and Guinea-Bissau. It is intended that the trans-boundary management efforts and the measures adopted in Guinea and Guinea-Bissau could be extended to the wider coastal region of this part of West Africa. Conversely, it would be beneficial to explore ways in which improved management of watersheds in other countries could enhance/add value to the effect of the biological diversity conservation and erosion control measures proposed for Guinea.

It would be helpful to link the conservation of the two protected area RAMSAR sites with benefits to other ecosystems and natural resources of the coastal zone. It would also be beneficial to give stronger emphasis to promoting ways in which improved management of catchments/watersheds in other both Guinea and neigbouring countries could enhance/add value to the effect of the biological diversity conservation measures proposed for the protected areas in Guinea, including the one shared with Guinea-Bissau.

5. Replicability of the project (added value for the global environment beyond the project itself)

There is good scope for the replication of the planned use of the coastal zone protected area concept in other parts of Guinea, and potentially in other African countries based on the experience gained and lessons learned during the life of the project. It would be useful to give more emphasis to the exchange of information and experience gained through the project with other countries in the region as the project progresses.

6. Sustainability of the project

There is a risk that the short-term improvements in the management of the two target RAMSAR sites could be undermined by continuing poor land and water management in the Coastal Plateau. There appears to be good potential for introducing extension of the MPA management model to include discrete catchments upstream in the first phase that could help ensure continuation of the changes the project aims to introduce as the project

design incorporates measures for both local participation and for human resources development and institutional strengthening which complement the Government's policies and management priorities, including the PACV.

However, it must be recognized that the planned protected areas are vulnerable to the effects of human pressures resulting in changes to the hydrology and erosion in the Coastal Plateau. To a certain extent, the pressures are being addressed by the PAVC, and the on-going management of the coastal and marine biodiversity management project will need to maintain close working linkages with the PAVC management team to help ensure that potential risks to the sustainability of biodiversity conservation efforts in the coastal zone are minimized where ever feasible.

Secondary issues

1. Linkages to other focal areas

The project design appears to be consistent with the stated operational strategies of the other GEF, Bank and other donor focal areas, and avoids negative impacts in focal areas outside the focus of the project. The proposed project activities appear feasible and cost-effective, and should contribute to global environmental benefits in other focal areas and in the cross-sectoral area of coastal land and water management.

2. Linkages to other programs and action plans at regional or sub-regional levels

The project seeks to build upon past, ongoing and prospective GEF activities. The project design could be strengthened by making more explicit mention of how the planned activities would be coordinated with work of other GEF projects and their respective Implementing Agencies and other bodies. This should include how links would be established with relevant ongoing regional or sub-regional programs and action plans.

3. Other beneficial or damaging environmental effects

The project seeks to improve the management of wetland ecosystems of importance to more than one sector of the Guinean economy. The planned measure should help reduce conflicts among agencies and economic entities seeking to maximize their respective use of the coastal and marine resources base. Improved management of the RAMSAR sites should yield other ecosystem services and social and economic benefits to local communities and those in the wider region. These benefits could be extended in time and geographic scale if the project was to incorporate improvements in the watersheds upstream as suggested above.

4. Degree of involvement of stakeholders in the project

Stakeholder involvement is incorporated as part of the "participative" nature of the planned activities. This addresses GEF emphasis on the development of activities to promote community-based management of biodiversity. Giving greater emphasis to the role of the private sector and local communities, specifically those concerned with agriculture and forestry in the catchments upstream, and commercial fisheries in the

coastal zone could strengthen the project design. The project could also elaborate on the use of concepts such as the co-management of resources, or contracts or negotiations with governments that define each stakeholder's responsibility in managing the resource, and the eventual devolution of biodiversity management measure to local groups and NGOs.

5. Capacity-building aspects

The project design gives a clear exposition of measures to strengthen public awareness and basic expertise of government officials as well as other stakeholders to support biological diversity conservation. However, the project design would benefit from further clarification of the measures to promote and maintain cooperation between the various groups of stakeholders, and transparent mechanisms to ensure the active participation of relevant stakeholders in the development, implementation and monitoring of project activities.

6. Innovativeness of the project.

Measures designed to assist the Government of Guinea in improving the management of protected areas through the use of protected areas is modestly innovative. The project would have greater innovative features if the ecosystem concept were to be more widely applied to incorporate the catchments/watersheds upstream.

Response to STAP Reviewer comment

The main technical issue raised as part of the STAP review was the need to clarify linkages between the coastal zone protected areas and the other parts of the coastal zone ecosystem given their obvious interdependencies, which was also identified in the strategic contect section of the report. The design team recognizes the validity of this comment and has subsequently elaborated the project description to clarify that the capacity building activities (component 4 of the project) and micro projects (component 3 of the project) must be seen in the context of a wtaershed approach given the obvious negative impact of poor management activities upstream on threatened areas downstream and vice versa, how decline of areas downstream will impact areas upstream. Technical support and review of land management plans will therefore also be done on a watershed basis rather than on a CRD basis to ensure that activities are part of a coherent action plan that mutually reinforce each other. All local development plans in the watershed that forms a coherent ecosystem with a protected area will be vetted by a watership management committee prior to approval to avoid inconsistent or counterproductive activities. Where these are found, discussions will be entered into with local communities to review the proposed activities and on a participatory basis amend the local development plan based on the broader information that the watership management committee can contribute. In support of this, the local investment fund under the projet supports a window geared towards the financing of activities that have uncertain or limited localized benefits, but likely high regional or global benefits and implementation of which would transcend administrative boundaries. This window would only require limited or no beneficiary contributions, depending on the activity.

The watership management committee can also propose and implement activities from this window after consultation of the affected populations to ensure that broader concerns are included and limited local implementation capcity is not overburdened. Once this approach has been proven, it will be adopted into PACVs approach in other areas.

The STAP reviewer felt that delays in Guinea-Bissau could negatively impact the creation and subsequent successful management of Guinea's first coastal zone protected area as transboundary activities would not be able to take place and thus activities by local populations in Guinea-Bissau have an undesired impact. This risk is judged relatively low by the design team given Guinea-Bissau's extensive experience in this area and the fact that the projet supporting the creation of the MPA in Guinea-Bissau is further along in the design process than this project. Also, there will be several donors supporting the activities in Guinea-Bissau (GEF, EU and IDA), supported by IUCN. In addition, the design team feels that the first protected area in the coastal zone can be established in Guinea even if there are delays in Guinea-Bissau or if no agreement can be reached between the two countries on management arrangements, as the watershed of the first protected area is only partially impacted by activities in Guinea-Bissau and population densities in these areas are relatively low.

Finally, the STAP reviewer felt that coordination and consultation between this project and other donor supported activities in the coastal zone and the sub-region could be clarified to ensure that there would be an appropriate forum for the exchange of experiences and thus the potential replication of best practices. This is one of the key roles to be played by the coastal zone forum. The forum does so for all donor funded activities. At the national level this would support the harmonization of approaches in the coastal zone, limit duplication of activities and support the integration of sustainable environmental resource use in development activities. At the sub-regional level it seeks to collaborate with other projects or programs that have similar objectives to this project or that may have an impact on Guinea's coastal zone. The forum would seek to learn from such projects through the exchange of information on an annual basis. Thus the forum will also add to sustainability of project activities.

Additional GEF Annex 4: Site Description Iles Tristao
GUINEA: Coastal Marine and Biodiversity Management

Two Ramsar sites, Iles de Tristao and Alcatraz, have been identified to form the first CCA in Guinea. The proposed project will support the process. The main characteristics are described below:

Iles de Tristao: The area is situated between the northern frontier of the country and the Rio Kompony; and between the baraban to the east and the Atlantic to the west. The site is located in the North Kompony region at the mouth of the Cogon and shares the river Cacine with Guinea Bissau. The area is mainly covered with mangroves, especially Katarak and Kapken Islands which are crossed by old barrier beaches settled with villages. Iles de Tristao (85 000 ha) are comprised of 4 islands (Katrack, Kap-Kin, Kantchdenki and Fore Souri). The Iles de Tristao coastal line is filled with sand banks, mangroves and prairies "Sesuvium". The mangroves cover a substantial surface (Rhizophora (harrisoni and racemosa), Avicennia and Langucularia. The islands inner land includes large trees, fruit trees and agricultural land. The transboundary protected area together with Guinea-Bissau would include Khoni Benki (nesting grounds), part of the Tristao Islands (hippopotamus on Katarak Island), and part of the mainland round Bansalé (large mammals).

Alcatraz (10 ha) is comprised of 2 small islands (ilot Alcatraz and ile de Naufrage). and Alcatraz is in the midst of Atlantic Ocean. Ile Alcatraz is a lateritic rock on the continental sill of the Atlantic, covered by a layer of approximately 3m of guano which has accumulated over a very long period. In the recent past (40-60 years ago) guano was dug in the dry season, which explains why deposits now vary in depth. Ile Alkatraz, which is bare of vegetation, is a dry, plateau where over 3,000 pairs of *Sula leucogaster* nest, forming the largest nesting site for the species in Western Africa. Nothing is yet scientifically known about the intertidal and submarine habitats although there are dolphin, manatee, shark and giant turtle. Ile du Naufrage is a resting place and nesting site for thousands of terns (black tern *Chlidonias nigra*, royal, Caspian, common, sandwich and least tern). Current main resource use around the site is clandestine industrial fishing by foreign fishing vessels from Ghana, Sierra Leone, Liberia, Senegal, Gambia.
Guano exploitation on Alkatraz clearly had a considerable adverse impact on the brown booby breeding population. In the 30s a team of about 25 people maintained an annual presence there between December and May. The bird population today seems to have completely re-established itself, thus providing a good example of how a bird species can recover once human activity on site has ceased, although C.B.G expatriates in Kamsar do flock to the site every weekend. The sealanes to Kamsar harbour pass a few dozen kilometres to the south of the two islands. There is therefore a risk of oil pollution when vessels discharge ballast. Every year, the DNE receives reports of oil slicks covering the whole of the coastal area. A visit by boat (without landing) is possible provided that the vessel and crew are suitably qualified for sea trips.

It needs to be recognized, that there is currently a lack of inventories and detailed studies on all (including these two) Ramsar sites. During preparation, scientific information will be collected and provided for at least the two potential MPA sites (Iles de Tristao/Alcatraz and Rio Pongo).

Ecological significance and species of global importance: Fresh water and salt water are mixing during rainy season, enriching sea with nutriments retenue par des mangroves. Major fish stocks present are Mugilidae, Clupeides, Ethmalosa fimbriat, Sardinella sp, carpe rouge Lutjanus spp, Sphyraena spp, Epinephelus sp, Arides, Pseudotolithus spp.

The sites contain further monkeys, aula codes, sea turtles, African manatee (both of them on IUCN red list as threatened species), and rare species such as *Hippopotamus amphibious*, crocodiles, dolphins and wales.

The Ramsar classification was mainly due to these islands importance for bird life and bird migration. The Iles de Tristao serves birds as food provider, zone for coupling, nesting, and recovery. Alcatraz is the biggest colonie (3000 couples) of Sule Leucogaster in West Africa. Birds represented are: Pelican gris (Pelecanus onocrotalus), Courlis corlieu (Numenius phaeopus), Heron goliath (Ardea goliath) Heron cendre (Ardea cinerea) Grande Aigrette (Ardea alba), Aigrette difforme, Alcedo spp, Gypohierax angolensis, Pandion haliaetus, Sterna sandvicensis. In addition, there is presence on Khoni Benki of a nesting colony of *Flatalea alba, Thrieskiornis aethiopica, Sterna caspia,* and gray-headed gull *Larus cirrocephalus* and presence of possible nesting presence of *Ciconia episcopus, Scopus umbretta, Haliaetus vocifer, Ardea goliath,* and *Balearica pavonica.* The site appears to be a wintering site for *Pandion haliaetus* and *Phoenicopterus rubber* and there is presence of *Trichechus senegalensis* in the tidal creeks. Other bird species present includes the African spoonbill, sacred ibis, Caspian tern, gray-headed gull, white-necked stork, hammerhead stork, fish eagle, goliath heron, crowned crane, ruff, osprey, lesser and greater flamingo.

Administration: Both islands fall under the "prefecture" of Boke and two CRDs: CRD Sansale (6395 residents) and CRD Kanfarande (19829 residents). The Population of Iles de Tristao is 5,580 people in the 4 districts Kadigne, Katfoura, Kasmack and Kap-Kin. Ile Alcatraz is not populated by humans.

Stakeholders involved:

- Sous-prefecture of Kanfarande and local administration (CRD)
- NGO UDESKA (Union pour le Developpement Social and Economique de Kanfarande)
- NGO ADESKA supports economic and social development on the islands.
- CNSHB: Surveys every 2 years coastal zone to get up-date on fishing practices and movements. Since 2000 plays a leading role and is the principal contact institution for the creation of the protected area.
- DNEF Direction Nationale des Eaux et Forets
- DNE Direction Nationale de l'Environnement
- OGM follow-up Observatoire Mangrove (ended in 2002)
- Communities
- International fisheries**.**

Mission Report from CNSH-B and DNEF

Resource uses and users of site:

First habitants were the "Nalous". These lived mainly from agriculture (extensive), forest products (mainly palm products), Elaeis guineensis, collection of mollusks, shellfish and subsistence fishing. The community traditionally is very dependent on natural resources and uses multiple habitats, ecosystems and natural resources for their livelihood. Fishing is only for subsistence, using low powered engines. In the 1950s immigrants from Kamsar, Boffa, a dn Conakry but also from the sub-region moved into the site and thus changed socio-economic and environmental dynamics. The site is now a prime area for small fisheries with fisher camps established. Katcheck fisher camp illustrates the specialization on the exploitation of one resources and their dependency. Society is now stratified with fishermen, transformers/fish smokers, wood seller for smoking. This intensive resource use is a threat in particular for the Nalous. Because the system used is concentrating on one species, it does not provide for regeneration and renewal of stocks. It also is the basis of many conflicts over resources between indigenous people and immigrants.

The local people earn a living from small-scale fishing, rice-growing and horticulture. In the surroundings/catchment area, there are cows pastured on Katarak. The mangroves are currently untouched by outside forest operators.

Indigenous conservation practices among Nalous include:

- Protection of sacred forests (e.g., Kap-Kin)
- Interdiction to traverse the river during the night
- Interdiction to fish in specific watersheds during rainy season and reproduction period
- Interdiction to cut large and old trees and the mangrove
- Interdiction to destroy and degrade habitats for medicinal plants
- Interdiction of selective fishery and use of specific products to satisfy external market

Site specific threats and impact of unsustainable use A more detailed assessment is planned under project preparation.:

- Fishing techniques (traditional and industrial) in particular for red-listed species such as manatee and sea turtles
- Destruction of mangroves
- Degradation of beach for egg-laying
- Poaching, hunting
- Stealing eggs from nesting colonies
- Capture of migratory birds.

Complementary conservation measures proposed:

- Establishment and management of large regulated forest tracts (including Konkouré-Soumba region).
- Delimitation and use of village mangrove forest

Complementary donor intervention: AGIR may extend its intervention zone to include Iles de Tristao. This would enlarge the transboundary corridor for terrestrial faune between Guinea-Bissau and Guinea. AGIR is equipped for surveys, GIS mapping and field visits.

The Tristao/Alcatraz Islands
Advantages and Obstacles for the Creation of a Protected Area

Advantages		Obstacles
Favorable stance of local communities - The Nalou (indigenous peoples) have a secular tradition of sustainable management and a profound knowledge of their environment. - They depend exclusively on these natural resources for their survival, and accordingly are highly sensitive to their degradation and motivated to preserve them. - The emigrant groups, principally engaged in artisanal fishing, are also in favor of strengthening environmental protection		**Influence of industrial fishing** - There is an increasingly pronounced presence of industrial fishing near the coastal area. - The techniques used by industrial fishing result in the indiscriminate capture of all types and sizes of fish. - Because of its proximity to the coasts, industrial fishing is coming into conflict with artisanal fishing (impact on resource availability, collisions between boats and canoes, etc.). - With their great financial and technical capabilities, and the emphasis they place on financial compensation, those involved in industrial fishing exert strong lobbying pressures on the national authorities to obtain fishing licenses.

measures. - There are credible representative structures at the local level, in particular the NGOs UDESKA and ADESKA, which stand ready to participate in the creation of an CCA.		
A natural environment that has yet to sustain serious damage - The mangrove ecosystem appears to be well preserved, and there is limited use of this forest fuel for firewood. - The space conservation practices of the indigenous groups (such as sacred forests) have made it possible to limit environmental degradation.		**Impact of artisanal fishing owing to migratory movements** - Artisanal fishing, as well as the processing and marketing of its products, constitutes the major activity of the immigrant population established in the Tristao Islands. - These migratory movements are buttressed by the fact that there are no clear property tenure rules in the maritime coastal area and by the inflow of people from conflict areas in neighboring countries (Sierra Leone, Liberia, Guinea-Bissau, and Côte d'Ivoire). - Because of competition from industrial fishing, artisanal fishermen have tended to turn toward the traditional subsistence fishing areas, which are also the areas where the fish stock reproduces and grows. - The magnitude and growth of this artisanal fishing activity has resulted in conflicts with the indigenous populations. In particular, they regard the practice as failing to preserve the environment, which is contrary to their traditions, and as leading to a loss of power over their own economic and sociocultural space, ultimately threatening their survival.
A favorable regional dynamic - The Regional Program for Coastal and Marine Conservation (PRCM), supported by the IUCN, WWF, the Fondation Internationale du Banc d'Arguin (FIBA), Wildlife International, and UNESCO, began operations in November 2001 and represents an appropriate framework for subregional concertation and coordination with a view to protecting the coastal and maritime area, making it possible to develop a subregional MPA strategy. - The member countries of the CSRP (Subregional Fisheries Commission—Mauritania, Cape Verde, Senegal, Gambia, Guinea-Bissau, and Guinea) have since 2001 been engaged in the process of establishing a network of MPAs. - There are already MPAs in the subregion, which has made it possible to develop national capacities and to accumulate experience that can be reproduced and built upon.		**Conflicts between the various activity sectors and users of natural resources** - Conflict between subsistence fishing and artisanal fishing. - Conflict between artisanal fishing and industrial fishing. - Conflict between farmers and those exploiting the mangrove forest (principally for smoking catches in artisanal fishing).
Credible institutional partners - The AGIR Program in Guinea has taken steps toward the establishment of a cross-border protected area with Guinea-Bissau and plans to extend its activity to the Tristao Islands. - The GMO project has accumulated		**Poor knowledge of the environment** - The inadequacy of material, human, and financial resources devoted to research has resulted in a highly superficial understanding of this environment. - The mobility of many animal species (migrations, natural displacement or pollution-induced displacement) contributes to the problems of surveying animal populations.

scientific credibility and extensive experience in mangrove studies. - The Centre National des Sciences Halieutiques de Boussoura (CNSHB) is the leader and primary player in the process of creating a protected area in the coastal zone in Guinea.		
Existence of a common maritime border with Guinea-Bissau - There is a neighboring site of major ecological importance (Mata de Cantanhez) in Guinea-Bissau, which is also the subject of a protection/conservation project. This project could be tied into the one for the Tristao Islands. - Possible association with this neighboring site would make it possible to achieve economies of scale in respect of studies and project implementation. - Guinea-Bissau already has significant experience with MPAs which could be shared.		**Existence of a common maritime border with Guinea-Bissau** - Need for harmonization of the national strategies for protection and conservation.

Additional GEF Annex 5: Approach to Create a Protected Area in Guinea and in the Subregion GUINEA: Coastal Marine and Biodiversity Management

Background and regional context:

The region's fish stocks are heavily harvested by foreign industrial fishing fleets which contribute significantly, through their licence fees, to State revenue, but which all too often come into direct competition with very dynamic local small-scale fisheries. This "grey gold rush" is facilitated by unprecedented technological developments. The impact of this competition is further exacerbated by the incursions of ever-increasing numbers of illegal fishing vessels. Other activities conducted in the coastal zone are of considerable economic importance: examples include mangrove rice farming, forestry, salt farming and, in a separate sphere, tourism.

The rapid development of these sectors, and the lack of inter-sectoral planning and coordination have resulted in the degradation of coastal habitats (i.e., reduction of mangrove forests, coastal erosion, accidental pollution) and their resources. This degradation leads to greater poverty for coastal-dwelling communities which, in turn, gives rise to unsustainable forms of fishing, such as harvesting young and undersized fish, dynamite fishing, using monofilament nets and taking sharks and rays for the sole aim of selling their fins. Disputes frequently break out among fishermen and also between interest groups from different economic sectors. In economic, ecological and social terms, the picture could be brighter if seaboard states in this region had the means to implement integrated management in the coastal zone.

The region's countries are indeed severely under-equipped to face these developments. Coastal zone management should be based on appropriate scientific research and on long-term monitoring of coastal societies and natural resources, as well as the physical characteristics of the ecosystems these resources are part of. Such research is greatly complicated by the fact that the resources are not readily visible and even more so by the fact that they migrate, more often than not crossing national boundaries.

Several Marine Protected Areas (MPAs) have been established along the coastline by West African states, chiefly by states members of the Subregional Fisheries Commission (CSRP), which includes the following six countries: Cape Verde, Gambia, Guinea, Guinea-Bissau, Mauritania and Senegal. These areas make it possible to preserve some of the coast's key hot spots, which are of crucial importance for the replenishment of fisheries resources and biodiversity as a whole. MPAs also protect fragile habitats such as seagrass beds and mangroves, and are home to human populations whose centuries-old environment-based cultural values have proved to be invaluable for coastal zone management. Finally, MPAs play an essential role in coastal and marine resource renewal, as well as biodiversity conservation at national, regional and global levels and are important to ensuring the future of human coastal cultures.

In recent years, national and local organizations and institutions in West Africa have also been working to promote coastal planning, in particular through the establishment of the Subregional Coastal Planning Network launched by IUCN in 1997. These efforts are premised on the awareness that coastal planning cannot be dissociated from more general management and land-use planning. Several partner institutions have decided to co-ordinate their efforts and funding in support of the Regional Marine Conservation Program (RMCP). This group comprises the Subregional Fisheries Commission (SFC), the World Conservation Union (IUCN), the Worldwide Fund for Nature (WWF), The International Foundation for the Banc d'Arguin (FIBA) and the United Nations Educational, Scientific and Cultural Organisation (UNESCO). See annex 7 for the policy statement signed by participating countries).

RMCP seeks to establish an effective network of marine protected areas in West Africa, with participative management by strong institutions, contributing to the sustainable development of the region by enhancing natural and cultural diversity.

Its aims are in keeping with the priority directions adopted by the major international conventions in this field, in particular the Convention on Biological Diversity, the Bonn Convention (on migratory species), the Ramsar Convention (on wetlands), and the Washington Convention (on international trade in endangered species of flora and fauna).

The proposed project needs to be seen as embedded in this long-term regional initiative. One particular aspect of this multi-level cooperation is an increased access to fundraising. Many bilateral and multilateral agencies as well as private foundations recognize the importance of coordinating environmental management on a larger scale as a key component in the war against poverty and as a way to preserve many of the region's globally outstanding natural wonders.

In an initial phase (2004-2008), the priority of RMCP will be to implement its recommendations through specific actions and to strengthen actor capacity. During the subsequent phases, the MPA network will progress toward becoming part of an integrated coastal zone management perspective, first at national, then at regional level.

Approach in Guinea:

Institutions currently involved in RMCP :

- National Fisheries Science Centre at Boussoura– CNSHB
- Department of Fisheries
- Department for Water and Forests
- Department for Environment

During preparation and support from RMCP, the following barriers and constraints to establish a MPA around Iles de Tristao and Alcatraz have been flagged and will be addressed through additional studies and international technical assistance:

- Selecting appropriate instrument for first protected area site. Three options are currently under discussion: (a) community-management reserved with zoning for different resource uses (e.g., zone for traditional fishery and nursery; zone for industrial fishery); (b) biosphere reserve; and (c) national park
- Insufficient scientific knowledge of ecosystem processes, habitats and species
- Insufficient human, technical and financial capacities
- Harmonization of national protected area's management system: Each marine protected area operates at a local level, where the participation and support of local communities and stakeholders is absolutely imperative. Impacts (both positive and negative) are more immediately felt at this level where people are often asked to make significant investments of time and space. The success or failure of any protected area depends on adapting management approaches to their unique socioeconomic and natural environment to resolve problems that they themselves have identified. But individual protected areas must operate within a context defined by national policy and legislation. Each protected area needs a flexible yet comprehensive management plan with zoning, surveillance and business plans. Clearly, the sustainability of conservation measures depends both on the effectiveness of on-site management and on the support provided by national level guidelines, policies and legislation.
- Strengthen existing monitoring and evaluation systems (fishery)
- Harmonizing politics for transboundary conservation and surveillance with Guinea-Bissau

- Integrating role and needs of protected areas in overall coastal zone planning process. It is particularly important that they be reflected in national and regional approaches to fisheries management, i.e., in negotiations on fishing agreements. Protected areas will only survive if the socioeconomic climate can provide a long-term guarantee of sustainable development in the region. It is therefore crucial to support public and private policies that promote sustainable development.

Preliminary roadmap for establishing Protected Area in the Coastal Zone:

1. PDF-B studies and other preparatory activities
2. Creation of and inter-institutional and multi-disciplinary commission (including MMGE, MAE, MESRS (Ministry of Higher Education and Scientific Research), Ministry of Hydraulics and Energy, Ministry of Fisheries and Aquaculture, Ministry of Land-Use Planning and Decentralization, Ministry of Tourism and Hotel Industry, Ministry of Plan, CNSHB, DNEF, DNE, University of Conakry, UDESKA, AGIR.,)
3. Agreement on instruments to be used (national park, community-managed reserve, biosphere)
4. Preparation of legal framework for the protected area (name, location, description of limits, mapping, surface, description geographic, justification, socio-economic and environmental impact assessments, decree)
5. Development of participatory protected area management plan

Additional GEF Annex 6: Micro-Projects to be Funded with GEF Resources under Local Investment Fund (LIF)
GUINEA: Coastal Marine and Biodiversity Management

The project will provide incremental grant resources to targeted CRDs that include at least the watersheds for the selected Ramsar sites (Iles de Tristao, Alcatraz for the first site, Rio Pongo for the second) for the planning, implementation and evaluation of micro-projects aiming to conserve and protect biodiversity and to provide alternative livelihood options with reduced impact on the resource base. The activities will initially start in the watershed covering the first site and then gradually include other sites as experience is gained (Rio Pongo watershed would be second intervention site). The project duration is limited as is funding, so much emphasis will be placed on doing it right in a limited geographic area, rather than dispersing activities.

The baseline process for the implementation of the LIF (PACV) will be followed but amended with:

1. a separate positive list for GEF eligible micro projects for investments and technical assistance
2. additional capacity building activities for strengthening local institutions throughout the environmental diagnostic and development process for the local development plan and annual investment plan
3. a reduced community contribution (incentives)

The incremental envelope per CRD is estimated at US$25,000 (base project has an envelope of US$50,000).

The proposed activities of the project are in line with those proposed in the OP2 guidelines. In fact, the project activities and micro-projects fall into the three categories described below:

- **Sustainable use activities:**
  Integrating bio-diversity conservation and sustainable use objectives mainly in local development plans; piloting projects providing alternative livelihoods for local and indigenous communities residing in and around the proposed protected area; strengthening capacity building efforts that promote the preservation and maintenance of indigenous and local communities' knowledge, innovation, and practices relevant to the sustainable use of biological diversity; piloting selected activities that are country-driven national priorities and which develop and/or test methods and tools, such as rapid biological/ecological/social assessment, geographic information systems.

- **Bio-diversity protection activities:**
  Integrated rural development on a sustainable basis, e.g., infrastructure, eco-tourism; natural resources management activities which emphasize integrated resources use with conservation and development; establishing long-term cost recovery mechanisms and financial incentives for sustainable use.

- **Conservation activities:**
  Strengthening, expanding, and consolidating conservation areas; assessing the impact of natural disturbances and the compound effect of anthropogenic stress; demonstrating and applying techniques to conserve biodiversity important to agriculture; supporting capacity building efforts that promote the preservation and maintenance of indigenous and local communities' knowledge, innovation and practices relevant to conservation of biological diversity with their prior informed consent and participation.

During project preparation these eligible activities under Component 3 will be further detailed. A preliminary assessment led to the following partial types of community micro projects eligible for GEF co-financing in PACV in CZMP target sites.

Investment related micro-projects/activities:

- Land and Water restoration
- Management of Waters
- Maintenance and/or recovery of riparian vegetation.
- Erosion control activity (reforestation, terracing, drainage canals)
- Protection of marginal lands against cultivation with annual crops
- Development of small-scale community-based eco-tourism facilities
- Development of small-scale harvesting facilities for medicinal plants

Non-investment related micro-projects/activities:

- Community-participatory awareness raising and information activities (e.g., introduction of new educational programs for schools)
- Community workshops on sustainable management of natural resource and resolution of resource conflicts
- Training for sustainable use activities and technically sound and economically justifiable alternatives to traditional practices that are highly destructive to biomass (fish smoking, domestic energy, salt production, shifting cultivation, etc.). Example 1: Women who smoke fish (and who typically obtain 1kg of dried fish with the use of 3.5 kg of mangrove wood) using improved fish dryers, which reduced the wood requirements by 50 %. Example 2: With traditional techniques, salt production requires the use of large amounts of mangrove wood (3 kg of wood per kilo of salt). Pilot activities in Boffa and Coyah involving sun-dried salt have introduced producers to a new, environmentally friendly technique that is not only less onerous in terms of the labor required, but also less hazardous to workers' health, in addition to yielding a whiter salt with greater consumer appeal.
- Promotion of indigenous knowledge for biodiversity

GEF cannot finance activities related to, *inter alia*, introduction of alien species, forest plantations or monoculture, or establishment of agricultural systems that move communities to marginal lands.

Additional GEF Annex 7: Sub-Regional Policy Statement to Support the Regional Marine Conservation Programme
GUINEA: Coastal Marine and Biodiversity Management

We, the Ministers of Fisheries and Ministers responsible for the management of Marine Protected Areas in the Member States of the Subregional Fisheries Commission therefore:

Appreciating the fundamental contribution that a greater commitment by the political decision-makers of the subregion could make to heightening awareness in the highest governmental spheres as to the strategic importance of coastal and marine areas in national policymaking, that such a commitment would lead to greater involvement of the public authorities, the private sector, NGOs and local communities in implementing the Regional Strategy for Marine Protected Areas and in coastal and marine management in general;

Noting with satisfaction the outcomes of regional consultations – especially those of the workshops held in Saint-Louis in April 2000 and in Nouakchott in February 2002 – which laid the foundations for the Regional Strategy for MPAs, the document which sets out the strategic directions to be followed by all those dealing with coastal issues over the next twenty years with respect to MPAs in West Africa;

Considering that the creation of a network of existing MPAs is crucial to ensure that they will fully achieve their purpose of protecting shared natural resources and the populations which depend on them, and that this approach draws upon the guidelines laid down by the *New Partnership for Africa's Development – NEPAD* pertaining to transboundary protected areas;

Considering the need for States in the West African subregion to harmonise their MPA conservation policies and to encourage fledging support for the conservation of coastal and marine natural resources in Member States of the SFC;

Considering that the aim of implementing the RMCP as a subregional initiative is to promote sustainable development of the coastal zone and that in view of this the Programme warrants the support of SFC Member States;

• Express our support for the Regional Marine Conservation Programme, which will enable our subregion to promote sustainable development of coastal and marine areas based on a healthy and productive environment;

• Support the Regional Marine Protected Areas Strategy presented hereinafter (full document available from files).

Signed by :

For the Republic of Cape Verde

Minister of Agriculture and Fisheries

Praia, 16 04 03

For the Republic of Gambia

State Secretary for Fisheries,
Natural Resources and the Environment

Banjul, 28 4 03

For the Republic of Guinea

Minister of Agriculture, Water and Forests

Minister of Fisheries and Aquaculture

Conakry, 10 -03- 2003

For the Republic of Guinea-Bissau

Minister of Agriculture, Forests and Hunting

Minister of Fisheries and Ocean Resources

Bissau, 17/3/03

For the Islamic Republic of Mauritania

Minister of Rural Development and the Environment

Minister of Fisheries and the Maritime Economy

Nouakchott, 08 APR 2003

For the Republic of Senegal

Minister of the Environment
and Nature Conservation

Minister of Fisheries

Dakar, 24 03 2003

Modou DIAGNE Fada

PAPA DIOUF

Additional GEF Annex 8: Threat and Root Causes for the Coastal Zone of Guinea]
GUINEA: Coastal Marine and Biodiversity Management

Threats:

Conversion, Fragmentation and Alteration of Natural Habitats

Growing pressure on the environment coming from human-induced activities is either threatening or actively converting, fragmenting and/or altering natural habitats all over the country, including biodiversity hotspots of global interest. Hence, in the coastal zone, this is of impact on the condition of remnants of the former Upper Guinean Forests, including the classified Forests, and the 6 designated, currently unprotected, Ramsar Sites.

Root Causes:

Poverty

The Coastal zone, represents the least deprived Natural Region in terms of combined economic and social services indicators in the country. However, with poverty remaining significant, capital to invest in sustainable management of natural resources by local communities is lacking. Furthermore, the diffusiveness, ineffectiveness and sometimes lack of land and water use regulations and responsible institutions are favoring unsustainable use of the natural resources.

Population Pressure

The territory of the coastal zone (43.730 Km2) comprises a shore line of about 300 to 320 km long and a width varying between 100 to 150 km. Within the national context, the coastal zone, representing about 15 to 18% of the national territory and hosting about 40% of the estimated 7.3 million population is definitely exposed to a high burden of environmental exploitation pressure. Between 1963 and 1996, the overall population growth within the coastal zone has been estimated at 292%. Guineas coastal zone continues to attract people both from within and outside the country, partly as a result of its economic advantages and the political instability of a number of neighboring coastal countries.

Urbanization

Three of the 10 most important cities of Guinea, in terms of population sie, are located in the Coastal Zone: Conakry, Kamsar and Kindia. The population of Conakry comprises about 16 % (1.094.075 in 1996) of the total national population and is still rapidly expanding. Population density in the zone ranges from over 400 habitants/ km2 in and around the cities to less than 20 habitant/km2 in rural areas. The concentration of people in urban centers leads to excessive pressure on surrounding natural habitats.

Wood Collection

The forest area in the coastal zone comprises humid forest, dry forest and woody savannas. Currently, a total of about 112,068 ha of forest, representing mostly the humid and dry forest, have been classified and are distributed over 32 locations. These are located mostly in the sous-prefectures of Kindia and Fria. The conditions of these forests have been seriously declining. Destruction or alteration of remaining unclassified forests, excluding mangroves, while representing mostly woody savannas (about 2,500,000 ha early 1990s), is most intense around the city of Conakry, as a result of its wood fuel demand. In 1989, charcoaling in the prefectures of Dubreka and Forecariah became prohibited but the measure has been more or less ignored.

Mangroves originally covered 385,000ha (8%) of the coastal zone. Much of this has been altered by cultivation (estimated 140.000 ha) of which half would have been abandoned as a result of acidification. An estimate of the remaining area of true mangroves is about 200,000 ha (late 1990s). Coverage is estimated to be regressing by 4% annually. Regarding the exploitation of the mangroves for wood in 1990, the following distribution of uses was estimated: rural households energy (59%), Conakry household energy (21%), drying and smoking of fish (24%), extraction of salt (36%). In particular the pressure on the mangroves resources North and South of Conakry are indirectly impacting local fisheries.

Cropping

Various crops such as fruit trees, oil palms, rice, and vegetable occupy the cultivated area within the coastal zone. Amongst these, rice is the dominant crop. Currently, Guineas rice demands depends for about 39% on export. However, the national agricultural development policy (LDP2 1998) in accordance with Guinea Vision 2010 aims to reduce import levels by increasing national production. In this context the *Plan d'Amenagement des Plaines Rizicoles de Guinee Maritime* (PAPR 2001) proposes to increase rice production in the coastal zone by 2005, by expanding the area under rice and by increasing yields per ha. The plan proposes an expansion of irrigated rice cultivation by 19,111 ha within the coastal stretch between Guinea Bissau and Conakry, covering the departments of Boffa, Boke, and Dubreka. This expansion would involve 12 "plaines". Among these is plaine Kapatchez, of which 4.542 ha, about 47% of its total area, would be irrigated. This is of environmental concern since it may negatively affect the condition of the Ramsar site of Rio Kapatchez.

Livestock holding:

In 1998, the coastal zone would involve 362,000 livestock units. Seasonal transhumant cattle herds moving between the plateaus of Telimele, Fria and Boke and the plains around Kamsar and Koba dominate livestock holdings in this region. This transhumant herd comprises about 80,000 heads of cattle, owned by about a 1,000 livestock holding families. In addition to this purely pastoral type of livestock holding there are also mixed crop-livestock holders, which are mostly located the southern hills of the Fouta in the region of Boke and Kindia. Already, competing interests of livestock holding and cropping for land and water are source of conflict between different types of producers. Hence, indicating the growing demand for land and water resources, the threat of encroachment of production system on natural habitats is tangible.

Harvesting of native plant species:

No detailed information on the use of native plant species in Guinea and in particular of the role of the Guinea'coastal zones in these has been found. However, it is clear that the encroachment of the production systems on the valuable natural habitats in the region and the exploitation pressure of valued species, are diminishing relevant medicinal resources.

Hunting:

For populations residing close to valuable natural habitats, containing high biodiversity, hunting provides the majority of the protein intake. Although formally, regulation of hunting is described in a 1997 law (l/97/038/AN), very little is known on the extent of hunting and the compliance with regulations. Poaching seems to be the more common activity. The declines in wild life populations have been noted on an anecdotal base. Regarding freshwater aquatic species –excluding true fish species- poaching of favored larger animals is threatening certain species including crocodiles, a varan (*Varan nilotica*) and a batrachian (*Phrynobatrachus tokba*).

Fishing:

Guinea's coastal and inland fish resources have been halved between 1986 and 1992, while more recent numbers estimate that current catch levels represent only one fifth of ten year ago levels. The contribution of the pressure in the shallower waters, closest to the coast, (demersal fish, shrimps and mollusk) by industrial and artisanal fishing is evaluated to reach similar levels. However, industrial vessels are encroaching upon the zones for artisanal fishing, leading not only to destruction of habitats, but also to destruction of artisanal fishery equipment and social conflict amongst industrial and artisanal fisherman. The pressure in the rest of the EEZ is pre-dominantly from industrial fishing, which is dominated by foreigners. The catches in the EEZ are more or less uncontrolled, with boats leaving the area through the open sea. The overexploitation of the fish resources also relates to the nature of fishing practices, which result in important losses in reproductive capacity. Guinea does not have the coastal facilities to receive and process industrial amounts of fish catches for export.

Water Pollution:

Overall lack of sanitation and waste management in the country is a major problem in the coastal zone and in particular in and around the urban centers. In 1997 in Conakry, the system in place was ineffective in the disposal and treatment of excreta and wastewater, household and industrial solid waste and storm water. In rural areas, localized projects exist to promote latrines. Within the coastal zone, the most prominent large-scale industrial activity is bauxite mining in Kamsar, Fria and Kindia. In particular, waste management of the first two larger sites, have a downstream impact on coastal natural habitats. Added to this there is also some uncontrolled artisanal mineral mining in the area (mostly gold and diamonds), which pollutes the adjacent waters. Furthermore, in particular the larger industrial sized trawlers dump fuel and waste.

In Site and Off- Site Land degradation and Water Flow Changes:

Land degradation and water flow changes through human activities such as road and waterworks, deforestation, cropping and uncontrolled open-pit mineral mining impact the condition of the watersheds involved. Since the coastal zone comprises downstream areas of numerous watersheds, it is being impacted by the accumulative effect of human activities within and outside the coastal zone. Uncontrolled changes in sedimentation in the watersheds are likely to affect the condition of the Ramsar Sites.

Legislative and Institutional Frame:

Legislation and institutional responsibility to maintain and protect the condition of natural resources does exist (*Code de Protection et de Mise en Valeur de l'Énvironnement, Code Foncier et Domanial, Code Forestier, Code de Chasse, Code de Peche, Code de l`Eau, Code Minier*). However, lack of leadership, means and ineffectiveness and/or inadequacy of those measures plus insufficient inter-institutional capacity,

coordination, collaboration and databank exchange mechanisms are allowing continued unsustainable use of natural resources, threatening the condition of the globally valued biodiversity.

Table 1: Poverty and Global Environment in Coastal zone, threats, root causes and project activities.

Poverty and Global Environment in Coastal Zone	Threats	Root Causes	Project Activities
The globally valued biodiversity of the coastal zone represent a significant portion of the natural resources on which in particular the poorest part of the residing population heavily depends for income, labour, food, water, shelter and health care.	Conversion, fragmentation and alteration of globally and nationally valued biodiversity of the remnants of the Upper Guinea Forest and 6 Ramsar Sites:	• Fast growing population: 292% between 1963 and 1996 • Concentrated in urban centers reaching densities of over 400 h/km2 versus less than 20 h/km2 in some rural areas • Uncontrolled expansion of unsustainable wood cutting, cropping, livestock holding, fishing, hunting and harvesting of native species • Lack of waste and sanitation management. • In and off-site land degradation and waterflow changes • Ineffective legal and institutional framework and capacity to protect the condition of valued natural habitats, including biodiversity. • Lack of inter-sectoral collaboration and databank sharing and exchange mechanisms.	Through linking with existing relevant initiatives such as PACV, AGIR, OGM, PEG and coordination with other relevant programs, CZMP aims to contribute to the preservation of the globally valued biodiversity of the Coastal zone by: • Supporting the establishment of Marine Protected Area in the zone while measuring the socio-economic and ecological impact. • Supporting institutional capacity and inter-sectoral collaboration, communication, and data gathering and exchange to facilitate the implementation of sustainable coastal zone management. • Establishing Local Investment Funds in and around potentially protected sites to support activities, which preserve biodiversity. • Raise local awareness for the need to preserve their natural resources and to build capacity to implement and manage relevant activities.

			• Support management and M&E of the project activities

Additional GEF Annex 9: Detailed Project Description
GUINEA: Coastal Marine and Biodiversity Management

Project Components:

The project has five closely inter-linked components. Three of these will provide incremental support to three components of the PACV. Two other components were added following a sector analysis of the coastal zone, which identified several threats to sites of global biodiversity importance. These components do not have an equivalent in the PACV and go beyond the objectives of the PACV. The project therefore seeks to address these threats in and around the targeted sites in collaboration with other partners and initiatives (Ministry of Planning, Ministry of Fisheries, Ministry of Mining, Ecology and the Environment, Ministry of Agriculture and Livestock, CNSH-B, OGM, AGIR, PRCM - *Programme Régionale de Conservation de la zone côtière et marine de l'Afrique de l'ouest* - WWF, FIBA, IUCN, Conservation International, etc).

Component 1: Protection and conservation of coastal Ramsar sites

This is the first of the two additional components, which does not have an equivalent in PACV.

Guinea's coastal zone has been identified as one of the West African biodiversity hotspots, however, until now, Guinea is the only country in the sub-region that has not established a protected area to conserve and enhance globally important biodiversity. The government has committed itself to the creation of a protected area as part of a regional network initiative (PRCM). Therefore, the project, through this component, aims to provide the necessary strategic and operational tools and experiences to establish at least one protected area through a participatory approach with concerned communities. This component will use lessons learned from other countries and initiatives in the sub-region to adapt them to the country and site-specific context.

It will have 2 sub-components:

1.1 Protected areas: This sub-component aims to establish at least one protected area. During preparation, two potential intervention areas, incorporating wetlands recognized under the Ramsar Convention, have been identified (i) Iles Tristao and Ile Alcatraz (two separate sites under the Ramsar convention) and (ii) Rio Pongo. The below map shows the different coastal Ramsar sites.

The sub-component will support the detailed mapping, inventory, diagnostic, and creation of the protected area. The collection of site specific biological, social, and economic data would employ existing information, databases, and updated satellite images. The preparation of studies, consultations, and proposals for creating additional new protected areas will include environmental and social studies carried out locally, as well as land tenure assessments. Further, the sub-component will provide technical assistance to develop an operational toolbox, based on the ones used by the PACV, for a replicable community-based approach. The toolbox will cover all phases from community-based information and sensibilization to participatory demarcation of proposed sites and planning of integrated land management plans. These plans will include specific measures to protect threatened habitats of global importance and to restore degraded sites with the communities living in and around the protected area. It will focus on training and capacity building for sustainable management of coastal zone ecosystems by local communities and community-based organizations as key change agents. As mentioned earlier, the project seeks to take a holistic approach to biodiversity conversation. The bufferzone of the protected area would

therefore coincide with the watershed of the Rio Komponi, which is an integral part of the ecosystem of the protected area. Direct support to communities and CRDs in the larger watershed of the Rio Komponi, creating a sustainable buffer zone around the protected area, would be provided under components 3 and 4.

For the Rio Pongo site, the project will support all preparatory work needed for the establishment of a protected aea. A second protected area may be established before the end of the project depending on the replicability of experiences gained with the first site. In the absence of another donor presently supporting these activities, the project would provide support to the CNSH-B and the DNEF to implement these activities (incremental operating funds, vehicles and equipment, short-term consulting services, and training). Expatriate technical assistance is expected to be provided by international NGOs.

1.2. Impact Monitoring and Evaluation. Project monitoring would include information on biodiversity status (key indicator/species groups), pressure on ecosystems (levels of threat), water resources and climate, island effect (levels of connectivity), and management effectiveness. The monitoring system will be piloted in the two CRDs that include the first protected area before being applied to the full project zone. This sub-component aims to support and strengthen the existing coastal zone monitoring system in relation to the identified sites for protected areas. Socio-economic and ecological indicators have been developed by OGM and will be tested and adapted, using a participatory approach with communities, during project preparation. The indicators are expected to be operational by March 2004. Baseline studies are being carried out in the respective watersheds around selected sites under PDF-B funding. The project will fund subsequent studies at mid-term and end of project, using the same methodology as the baseline study to ensure compatibility of results, which will serve to evaluate progress towards the project's objectives and confirm or adjust interventions. Training will cover data collection methods, interpretation and implementation of the biodiversity monitoring system, dissemination activities for preparing local communities, and methods for accessing and providing information relevant to the monitoring of marine protected areas.

The site-specific information from the studies will be fed into the existing geo-referenced Environmental Information System database on local ecology, socio-economic dynamics and human activities and their impact on the coastal zone, which is maintained by OGM. This would ensure the continued availability of information to a larger audience.

The GEF grant will only provide funding for the incremental costs of carrying out the activities directly related to the project, as the French Government is already funding a large part of the costs of the OGM.

Component 2: Institutional strengthening for integrated coastal zone management
This is the second additional component, which does not have an equivalent in PACV.

The weak capacity of institutions at national and regional level to sustainably plan, manage and monitor the area's natural resources and coastal ecosystems is a barrier to the effective protection of coastal biodiversity in Guinea. Targeted capacity building will be provided for stakeholders at national and local level. The specific objective of this component therefore seeks to strengthen the framework for integrated coastal zone management with a view to mainstreaming biodiversity conservation and the establishment of a network of protected areas in the coastal zone at the national and sub-regional level. It will have 2 sub-components:

2.1. Framework for sustainable coastal zone management:
Under this sub-component, three sets of activities would be executed: (i) the development of an multi-sectoral coastal zone management master plan, (ii) development of a vision and policy framework for

a network of coastal zone protected areas in Guinea including an action plan with sub-regional linkages, and (iii) a study to identify options for financial sustainability of such protected areas.

I. The first set of studies aims to review and evaluate existing sub-sectoral master plans concerning the natural region (Master Plan for Guinea Maritime from 1992, Rice development strategy, Mangrove management, shrimps cultivation, mining, and possibly others to be identified (including the "Decret pour la creation d'un Parc National a Boke" from 1925). The project seeks to adapt these into a coherent multi-sectoral strategy for the sustainable development of the coastal zone. Both the preliminary results and the final report will be discussed in a national workshop for validation of recommendations.

II. The process to develop a protected area policy will focus on setting goals and principles, concepts, public participation process, legislation and socio-economic consideration. The process will be supported by international NGOs and regional projects active in the sub-region (including the PRCM and the regional fisheries management project). Best practice approaches will be reviewed on applicability and replicability to the Guinean context. In the context of the action plan it aims to build on work done by other donors to draft application decrees of existing legislation, so that the use of the protected area resource base is fully regulated and monitorable (surveillance).

III. The third set of studies will explore different options to ensure financial sustainability for the conservation of coastal biodiversity and its protected areas, including but not limited to the establishment of an environmental trust fund. It will also investigate local level partnerships with financial and development agents for continued implementation of productive activities that combine conservation with socio-economic use of the ecosystem.

The sub-component will be managed by the studies unit within the Ministry of Plan. The GEF grant will fund the second and third sets of studies. The first set of studies will be funded in conjunction with planned development strategies, with the project providing gap funding.

2.2. Guinea Coastal Zone Knowledge and Communication:

This sub-component is concerned with the existing knowledge and communication gaps at sub-regional, national, and local level. It therefore aims to increase and strengthen coordination efforts between concerned stakeholders.

The project will support the establishment of a permanent forum to discuss and suggest updates or new strategic policies for the conservation and preservation of the coastal zone. At the national level this would support the harmonization of approaches in the coastal zone, limit duplication of activities and support the integration of sustainable environmental resource use in development activities. At the sub-regional level the forum would seek collaboration with other projects or programs that have similar objectives to this project or that may have an impact on Guinea's coastal zone. The forum would seek to enhance the impact of different activities through the exchange of information. Thus the forum will also add to sustainability of project activities. The project will support annual coastal zone management meetings and regular information exchange workshops on environmentally sustainable management and biodiversity in coastal zones in order to strengthen the knowledge base on the threats, causes and status of the coastal zone and to make this information available to decision-makers. Members of the forum would include a broad range of stakeholders from Guinea and countries in the sub-region and would be chaired by a senior Government representative. The sub-component will support Guinea's participation in the PRCM and other sub-regional bodies to gain from lessons learned elsewhere and replicate and adapt successful models for coastal zone conservation and management.

The project will provide support for the creation of a multimedia library of coastal documentation at OGM, which will serve as a repository of data collected from a variety of sources as part of project preparation and implementation. Part or all of the information may be placed on the internet. NGOs, research institutes, other donor funded projects, will be invited to use this internet site as a portal to ensure easier access of information. Information copied onto CDs or DVDs will be made available to interested Government agencies. A communications strategy would be developed to disseminate information to local populations (educational materials, radio spots in the local language, etc.).

The sub-component will be managed by the Ministry of Plan through its Rural and Environment Division. The GEF grant would fund the communications strategy. Participation of Guinea in sub-regional activities and the permanent forum would be shared with all donors involved in the coastal zone.

Component 3: The Local Investment Fund.
The LIF component of the PACV aims to stimulate local development and give the means to project beneficiaries to reduce dependencies on unsustainable natural resource exploitation by transferring grants directly to CRDs. The LIF has the following characteristics:

- participatory identification and selection of micro-projects
- transparent management of resources
- local control of all construction performed under contract; and
- local responsibility for maintenance

The PACV LIF has two parts (windows): (a) a Village Investment Fund (VIF) which constitutes 95% of the component's funds, and (b) a regional (involving more than one CRD) Innovation Fund (IF) representing 5% of funding, which has not been operational during the first phase. During the first phase of the PACV the VIF is funding basic infrastructure such as village access roads, small bridges and drifts, health posts, schools, latrines and water points. For all activities the VIF contributes 80% of the costs with communities contributing the remainder in in-kind (15%) and cash contributions (5%).

The project does not seek to establish new procedures for its LIF contribution. Instead it will provide additional resources to communities using procedures tested by the PACV during the first phase. Procedures will be transparent so that for communities there is only one FIL.

3.1: Village Investment Fund (VIF) for sustainable management of resource base
The project would provide financial resource for the populations in the CRDs covering the watersheds that form an integrated part of the ecological system culminating in the Ramsar sites. Initially, activities will focus on the watershed that includes the Alcatraz/Tristao sites and then be expanded as experience is gained. It will fund incremental activities to enhance the resource base and restore globally important biodiversity identified during project preparation. The supported activities aim to stop and where possible reverse the destruction of habitats of local ecological, economical and globally important biodiversity, which is mainly related to the unsustainable practices for artisanal fishery, mining, farming and livestock. All sub-projects under the VIF are executed by beneficiary groups who will champion the activities.

Eligibility criteria for VIF activities have been identified during preparation and will be adapted for each project target coastal site. The project preparation funds are used to test the feasibility of the pilot approach in the two CRDs, in and around the islands of Alcatraz and Tristao. These two CRDs cover a substantial part of the Rio Komponi watershed.

The component approach is two-fold:
First piloting the combined VIF in the two CRDs covering and or neighboring the identified sites for the first protected area (initially Iles Tristao and Alcatraz), and scond, expanding this approach to other parts of the coastal zone by targeting CRDs around three of the remaining four Ramsar sites and sites in the zone south of Conakry on which at the present time inadequate information is available.

Micro-project / typology will likely include:

- Analyze the potential for incentives for reforestation and use of fuel efficient technologies for activities that currently account for a high demand on mangrove wood (salt making, smoked fish, energy efficient stoves)
- Use of alternative agricultural technologies, and testing their environmental and economic sustainability and whether they improve income of local population as well as the ecological and economic sustainability of production systems.
- Incentives to plant and use medicinal plants
- Support to alternative livelihood strategies targeted at sub-groups that hitherto lived from unsustainable exploitation of natural resources (all involved in fisheries, hunters, charcoal manufacturers, etc.)
- Rehabilitation of soils and vegetation (dissemination of seeds and/or possibilities for establishing nurseries)
- Protection of river banks and slopes

3.2: Innovation Fund (IF)
Project support to this funding window would provide resources for the following types of subprojects that would have:

- large external benefits and that need to be implemented as part of activities covering two or more CRDs (livestock corridors, ad hoc research in adapted agricultural technologies, extension of adapted agricultural technologies, watershed protection activities, etc.);
- implementation of research-based activities to improve the resource base;
- expected benefits that will not be visible for sometime or are, as in the case of pilot activities, uncertain; and
- a private character such as pilot income-generating activities (e.g. eco-tourism, commercialization of medicinal plants, etc.).

The component would be managed by the PACV. GEF grant support to this activity would in part be incremental and would augment resources available under the PACV II FIL as these are insufficient, and in part they would provide funding for activities not eligible under the FIL. The project will not intervene everywhere the PACV has a presence as this would unnecesarily dilute resources and not yield the hoped for outcome. Instead, the project will only intervene together with the PACV in those CRDs where the populations activities directly impact the wetlands and areas of high biodiversity value (the watersheds of the selected Ramsar sites). This is most likely achieved by selecting CRDs and communities sharing a common watershed with these sites. On this basis, the project is expected to intervene alongside the PACV in 10-20 CRDs in the coastal zone by year 4. The project will use the experience gained under the AGIR project to help guide pilot activities and to ensure that donor supported activities in the same watershed follow a coherent approach, even in areas that cross political boundaries.

Component 4: Support for Local Capacity Building.

The objective of this component is to rationalize and operationalize the regulatory and institutional environment for local development. The component supports the following activities: (a) strengthen the

capacity of CRDs to manage local development programs; (b) sensitizing and training elected local officials and CRD administrative and technical staff in the areas of local development government, planning, and financial management.

Incremental GEF grant funding to this component would focus on providing support to CRDs to develop and manage environmentally sustainable local development programs, with emphasis on biodiversity conservation.

The current land management plans are focusing mainly only on community-based infrastructures and are reviewed based on limited information. The project will provide additional funding to the CRDs, change agents and communities in the target watersheds for training and tools to assist them in devising sustainable land management plans that specifically include biodiversity protection and sustainable use. In addition, it will support and encourage community organization and the formation of associations (e.g., artisanal fishery associations). The project will pay particular attention that land management plans of the different communities/CRDs form a coherent framework based on constraints and threats elsewhere in the watershed and address key environmental project priorities. In addition, it will verify whether proposed activities do not have an adverse impact downstream. To this effect a watershed committee will be formed covering most or all of the watershed of which a Ramsar site is part. These watershed committees will include representatives of technical agencies and the CRDs covering the watershed. Where concerns arise, participatory reviews will be organized with with concerned communities.

Capacity building activities supported under the project include:

- Training and organization of local project beneficiaries so that they can participate in the process and be conscious of and fully understand the situation with which they live and the consequences of different actions on the environment and their longer-term livelihoods;
- Organization of field visits to show the interaction of different activities in the watershed on the natural resource base;
- Build and/or strengthen the capacity of beneficiary groups to identify and implement activities under the LIF;
- Development of technical capacity related to conservation of the environment and sustainable development, in institutions involved in project execution and management;
- Train decision makers and opinion leaders on the benefits of the sustainable use of natural resources and techniques for preservation and conservation; and
- Strengthen the existing institutional structure in order to reorient it towards sustainable environmental management

The approach will be replicated throughout the coastal zone by the PACV once tested and refined.

Component 5: Project Management and Monitoring and Evaluation.

The objective of this component is to ensure cost-effective, efficient and streamlined project implementation of the four other components. The project would provide incremental funding only to the implementing agencies.

5.1. Project Management.

Overall management and coordination of the project will be ensured by the Project Coordinator (*Coordinateur du Project*, CP) in the Ministry of Planning. The CP is a line manager who will need support for the additional responsibilities of the project. The CP will be supported in his work by a short-term consultant (about 8 weeks per year), who will assist in the compilation of the progress reports

and the annual work programs and related budgets.

The CNSH-B will implement the first component of the project as part of its core activities in collaboration with DNEF. Both agencies have strong technical capacities and have a long history of working together in the project intervention sites. The project would provide additional equipment and vehicles, and incremental operating funds, to each of the two agencies to assist them in executing their responsibilities under the project. No additional consulting services or contractual staffing is envisaged.

The Ministry of Planning, responsible for the second component, has the technical capacity to manage the studies and other activities but lacks operating funds and equipment. The project will therefore provide sufficient operating funds and equipment to the Ministry to enable it to carry out the assigned activities.

The PACV PCU which has shown its strength during the implementation of the PACV will be appropriately strengthened by the project with the addition of an accountant, a natural resources specialist, and a secretary. Consulting services will also be provided to strengthen PACV's M&E capacity to work with the project's Geographic Information System and prepare detailed cartographic information on project CRDs. In addition, PACV will receive funding for a vehicle and equipment, and incremental operating costs.

5.2. Financial Systems and Audits.

Each agency responsible for a component under the project will maintain separate financial records by source of funds in compliance with generally accepted accounting principles, and prepares separate financial statements.

The CP will have only a small budget under the project, which will be managed by either the PACV or an accounting firm. In both cases, double signatures will be required to ensure proper management of the accounts. The PC will not have a separate special account, but instead use the same special account as the PACV albeit with different disbursement categories. The coordinator will ensure that the annual audits are organized for all project implementing agencies

CNSH-B's financial management unit will be subject to a full assessment during project preparation to ensure that it is able to manage project funds in accordance with Bank fiduciary guidelines. The manual of the PAVC will be adapted for use by the CNSH-B. CNSH-B will have its own special account to ensure that sufficient funds are available at all times for efficient project implementation. DNEF, which will support the CNSH-B in the implementation of the first component lacks the ability to manage funds in accordance with Bank guidelines and will therefore not directly manage funds.

The Ministry of Planning does not have the capacity to manage project funds in accordance with Bank fiduciary guidelines. As the project has limited resources, which are insufficient to also support such capacity building initiatives, and the requirements of project financial management are greatly different from public sector requirements, it was agreed that financial management under this component would be done under a contractual arrangement with either the PACV or an accountant firm.

PACV has a performing financial management system, which has been audited several times. The manual of the PACV, was recently updated and will be used for the second phase. Each agency responsible for a component under the PACV already maintains separate financial records in compliance with generally accepted accounting principles and prepares separate financial statements. The administrative manual of the PACV will also serve as manual for the two components of the project implemented by the PACV.

Some minor changes will have to be made in software parameters and the manual to allow for expenditures to be imputed to the GEF as source of funds and to reflect the difference in sub projects. This will be carried out as part of project preparation. A separate special account and project account will be established for the project to prevent comingling of funds.

5.3. Monitoring and Evaluation. The objective of the projects performance monitoring and evaluation (M&E) system is to respond to the internal management and supervision needs of all the project's stakeholders, including the executing agencies responsible for implementing the different project components, CRDs for the microprojects, the Steering Committee, and donors, including the Government. The monitoring system is organized as a network with each executing agency in charge of a component reporting its activities to the CP, which maintains a consolidated system. In order to avoid having to build a separate system, use will be made of existing project supported Monitoring and Evaluation Units in the PACV, CNSH-B and the OGM.

Each executing agency will be required to submit a bi-annual progress report for its component to the CP no later than one month following the end of each semester. These individual reports are compiled into a consolidated progress report for the entire project. An independent analysis will be conducted at mid-term and towards the end of the project.

The mid-term review and an evaluation at the end of the project will be conducted jointly by the Government of Guinea and interested co-financiers of the project. These reviews will be based in part on the results and recommendations of the evaluations indicated above and will help make adjustments resulting in a more efficient implementation of the project.

To measure project implementation progress, the national M&E team of the PACV will be reinforced to also measure progress under this project and be able to monitor the additional indicators under the project. The PACV M&E unit will only be responsible for the monitoring and reporting of project implementation under the responsibility of the PACV (components 2 and 3). CNSH-B and the Ministry of Planning, who will implement components 1 and 2 respectively will monitor progress implementation for the activities under their responsibility.

Project impact evaluation will be contracted out to the Guinea Maritime Observatory (OGM). This scientific Observatory has extensive experience in the coastal zone and measures trends and dynamics related to pressures on the zone's natural resources and collects data on poverty, vegetative coverage, etc. It builds on a previous, French funded scientific observatory of the mangroves (*Observatoire de la mangrove*). This observatory will receive project support to monitor the project's impact on the selected project sites. The OGM has launched an innovative approach towards indicator development and testing in two pilot sites in the coastal zone. It is based on a highly participatory approach to first assess community perceptions of livelihood and their environment over time before socio-economic and environmental indicators are defined jointly with the communities. This approach allows that communities not only understand but truly own these indicators and use them for their local decisionmaking. Communities will also be empowered to become active participants in the local monitoring and evaluation process (data collection and interpretation). Collection of other indicators specific to this project, such as information on species (flora and fauna), water quality, land use, etc., will also be tested as part of project preparation. It is expected that these indicators will be fully owned by coastal communities and incorporated in local decisionmaking processes. Data collection will take place with concerned communities. The proposed project will use this pilot approach and apply it with OGM's support in the target sites.

It should be recognized that long-term project impact cannot be measured during the four years of project

implementation, acknowledging also as climatic influences play an important role, however, the collected data will contribute to a better knowledge of coastal zone issues, make informed decisions and serve as a solid foundation to evaluate a potential second phase.

Project Costing.
A Detailed cost analysis by component will be presented following the pre-appraisal mission.

Component	Indicative Costs (US$M)	% of Total	Bank financing (US$M)	% of Bank financing	GEF financing (US$M)	% of GEF financing
Protection and conservation of coastal Ramsar sites	4.40	24.4	0.00	0.0	1.50	30.0
Institutional strengthening for integrated coastal zone management	2.30	12.7	0.00	0.0	0.80	16.0
The local investment fund	5.20	28.8	3.00	42.9	1.20	24.0
Support for local capacity building	4.35	24.1	3.00	42.9	0.70	14.0
Project Management and monitoring and evaluation	1.80	10.0	1.00	14.3	0.80	16.0
Total Project Costs	18.05	100.0	7.00	100.0	5.00	100.0
Total Financing Required	18.05	100.0	7.00	100.0	5.00	100.0