

#1

Request for PDF Block B Funds

Mozambique: Marine and Coastal Biodiversity Conservation and Management Project

Country:	Mozambique
Requesting Agency:	World Bank
Eligibility:	IDA Eligible; ratified Biodiversity Convention 8/25/95
Project Cost:	About US\$ 10 million
Tentative Financing Plan:	US\$ 5 million GEF grant US\$ 4 million co-financed US\$ 1 million Government of Mozambique
PDF Block B Funds Requested:	US\$ 350,000
PDF Co-Funding:	US\$ 100,000 PHRD (Japanese) grant US\$ 30,000 World Bank US\$ 70,000 European Union US\$ 10,000 Natal Parks Board US\$ 50,000 Government of Mozambique US\$ 50,000 To be identified
Block A or B Awarded:	No

Summary of Project Objectives and Description

1. **Background.** Mozambique's coastal zone is unique in the East Africa region in terms of the quality, diversity and species richness of its habitats. The coastal waters support threatened endangered fauna, such as 5 species of marine turtles, abundant coral assemblages, large expanses of seagrass beds which are home to threatened dugongs, and significant areas of mangrove forests. These habitats are critical for the survival of commercially valuable and environmentally unique species. Largely as a consequence of the past two decades of war and political instability which deterred the evolution of most economic activities in the coastal zone, the coastal ecosystems have remained in relatively pristine condition. However, the subsequent establishment of what appears to be lasting peace and the anticipated rapid transition to a dynamic economy portends rapid development. While the biodiversity and the natural beauty of the pristine coast combine for a high potential for supporting sustainable coastal development this potential could be undermined by the current virtual lack of coastal management capacity in the country. A narrow window of opportunity to address these threats exists, but immediate and decisive action is needed. The need for action has been recognized in both the National Environmental Management Program and the National Forestry and Wildlife Program each of which prioritize management of coastal and marine biodiversity.

2. **Objectives.** The proposed project will strengthen the conservation and management of globally significant marine and coastal biodiversity in Mozambique. Its broad objective is to help implement the coastal and marine biodiversity strategy defined within the National Forestry and Wildlife Program, within the overall framework of the National Coastal Zone Management Program. Its specific objectives will be to:

- (a) improve Mozambique's capacity to protect and conserve and sustainably use its globally valuable coastal ecosystems and species by building new, and enhancing existing, capacity of the relevant institutions;
- (b) strengthen the management of existing coastal and marine protected areas and extend the protected areas system to include selected globally-significant sites;

- (c) test alternative participatory systems for managing and protecting biodiversity along Mozambique's coastline; and
- (d) develop mechanisms to enhance the financial sustainability of, and support for, the coastal and marine protected area system.

3. **Project Description.** The project will have 4 main components:

(a) **In-Situ Management of Coastal and Marine Biodiversity**

This component will focus on support to in-situ conservation of coastal and marine biodiversity in Mozambique through four main thrusts:

Coastal and Marine Protected Areas. Activities will include: (i) strengthening existing Marine Protected Areas (MPAs), including elaboration and implementation of management plans, development and rehabilitation of infrastructure and equipment, and recruitment and training of staff; and (ii) extending the boundaries of other priority PAs, to include coastal and marine areas as appropriate.

Marine Mammal and Sea Turtle Management Programs. Activities to include: (i) surveys of current population status and habitat range; (ii) tagging and tracking studies to monitor population dynamics, and migrations; (iii) development and implementation of detailed management plans for each of the focal species; and (iv) related education and public awareness.

Sustainable Funding Mechanisms. Identification of instruments and mechanisms to cover recurrent costs, such as user fees, trust funds and natural resource taxes.

Legislative and Regulatory Framework. Activities to include: (i) the review of existing laws that govern and influence the protection, conservation and use of coastal and marine biodiversity, and (ii) the creation of new laws and regulations, such as those demarcating and governing activities affecting specific protected areas and species.

(b) **Community-Based Management of Biodiversity for Conservation and Sustainable Use**

This component will be closely linked to component (a) above. It will employ an intersectoral and participatory process to develop and test models for community-based biodiversity conservation and sustainable utilization. Partnerships will be encouraged between local communities and, as appropriate, government agencies, the private sector, and local and international NGOs. The management of biodiversity by communities will form an integral part of protected area management within and immediately outside MPAs as well as in other coastal and marine natural habitats with high global environmental value.

(c) **Strengthening the Human Resources Capacity of Institutions Affecting Coastal Biodiversity Conservation and Management**

This component will serve to increase the national capacity of government and non-government institutions to manage coastal and marine biodiversity through the support of the development of an appropriate skills mix over both the short and long term. Target groups include personnel at all levels, from guards and park administrators to researchers, planners and decision makers, drawn from (i) Ministry of Agriculture and Fisheries (MAP) and Ministry for Coordination of Environmental Affairs (MICOA), both of which are involved in biodiversity management; (ii) the ad hoc biodiversity group drawn from across ministries, agencies and Eduardo Mondlane University (UEM); and (iii) local NGOs. To meet short-term needs, the focus would be on on-the-job training, exchange programs, twinning programs and short courses, preferably taken within the region. Over the longer term, national capacity will be more sustainably enhanced through the introduction and strengthening of relevant courses in the UEM curricula (e.g., coastal zone management, biodiversity management, marine biology, etc).

(d) Conservation Networks and Public Awareness

This component is intended to increase understanding and awareness of biodiversity conservation and sustainable use issues following a two pronged approach. First, linkages among Mozambican resource managers, planners and researchers and their regional and international counterparts will be promoted. For example, mechanisms for establishing sustainable support networks for researchers and managers involved in the management of marine turtles, dugongs and other rare and endangered marine species (twinning arrangements, Internet connections), will be identified during the project preparation process. Second, public awareness and political commitment will be heightened through information campaigns using various media, including publications, radio, TV, and community level initiatives such as public meetings and the use of amateurs. The target audience will include nationals as well as international visitors (general public, private sector, decision-makers, local communities, tourists).

GEF assistance is expected to focus principally on components (a) and (b). However, incremental costs will need to be assessed during preparation

Scope .

4. The proposed project will extend over five years and it will be comprised of complementary activities undertaken at both the national and sub-national levels. This dual approach attempts to integrate the creation of an enabling environment for management at the national level, with local level components which actively involve local communities and pilot test management arrangements and interventions. National level interventions would include, *inter alia*, creation of an enabling legislative and regulatory framework and establishment of appropriate institutional and organizational arrangements.

5. Sub-national activities will focus on specific and localized management issues and will build upon local knowledge. These activities will involve the application of practical, locally participatory methods for managing coastal resources and resolving conflicts over coastal resource uses. Since it will not be possible to implement practical management activities for the entire 2,700 km coastline selected priority sites must be identified. Criteria for selection of pilot management areas will be identified as part of the project preparation process. Three to four priority sites will be selected. Possible sites include Bazaruto, Pomene, Marromeu, Inhaca, Maputo Game Reserve, Primeiras and Segundos Islands, and Nacala-Mossuril (see Annex 1). Priority will be given to existing protected areas of global biodiversity significance and communities in the vicinity of these areas.

Description of PDF Activities.

6. A PDF Block B grant is being requested to support preparation of activities which are expected to have global benefits in the area of biodiversity. A preliminary identification of the necessary preparation activities was undertaken following a broad participatory workshop on coastal zone management, involving participants from government agencies, scientific community, private sector and national and international NGOs. This was followed by a more restricted working session of the inter-institutional preparation team in Mozambique, comprised of representatives from UEM, MICOA, DNFFB, and Ministry of Commerce, Industry and Tourism (MICTUR).

7. The requested PDF grant would co-finance:
- rapid ecological surveys to determine condition, threats and global significance of sites, including aerial and field surveys to determine important turtle nesting and feeding grounds and dugong migration routes (particularly for the Bazaruto Archipelago and Inhaca Island);
 - social and economic assessments, workshops and participatory consultations at selected project sites to identify opportunities for community-based management and potential alternative livelihood activities;
 - focused studies of legislative, regulatory and institutional framework, as well as capacity building and training needs in support of management and sustainable use of biological resources in coastal and marine zones, especially marine protected areas and endangered species;
 - economic assessment of selected protected areas, including options for generating revenues for meeting recurrent costs;
 - development of a proactive public awareness strategy;
 - international and national consultants to assist GOM in defining detailed activities and the costs of each project subcomponent; and
 - field travel and coordination costs for national counterparts.

Eligibility.

8. Mozambique ratified the Convention on Biological Diversity on August 25, 1995. The proposed project is consistent with Mozambique's National Environmental Management Program and the related National Coastal Zone Program, the National Forestry and Wildlife Program, the Convention on Biological Diversity and the guidance provided by the Second Conference of the Parties to the Convention on Biological Diversity, which calls for increased emphasis on coastal and marine biodiversity.

9. Coastal and marine biodiversity conservation is recognized as a priority at both the national level and the sectoral level in Mozambique. There are two related national government programs of relevance. The first is the nascent National Coastal Zone Management Program (Programa Nacional de Gestao Costeira --PNGC), coordinated by MICOA as a sub-component of the National Environmental Management Program (NEMP). The second is the National Program for Forestry and Wildlife, which is currently being developed by the Ministry of Agriculture and Fisheries' National Directorate for Forestry and Wildlife (DNFFB). The National Biodiversity Strategy and Action Plan, to be prepared with UNEP assistance, is expected to reinforce the importance of coastal and marine biodiversity sites.

10. Mozambique's National Coastal Zone Management Program. The NEMP, approved by the Council of Ministers in August 1995, represents Mozambique's master plan for environmental management over the next ten years. The document identifies the country's principal environmental problems and their underlying causes and divides these into the following key focal areas for priority intervention: environmental policy and legislation; environmental awareness and education; and natural resource management in rural, urban and coastal areas. The coastal focal area is covered by the PNGC.

11. The overall objective of PNGC is to promote the rational and sustainable management of Mozambique's coastal and marine resources by maximizing the benefits provided by the coastal

zone to all stakeholders and to minimize the conflicts between alternative uses. Specifically, the program aims to (i) strengthen coastal zone management capacity and coordination within and across sectors as well as at the national and local level; and (ii) protect and maintain the productivity and biological diversity of coastal and marine ecosystems.

12. Mozambique's National Forestry and Wildlife Program. DNFFB as the government institution with the mandate for biodiversity conservation is developing a national program which outlines the social, ecological, and economic objectives for terrestrial and aquatic biodiversity conservation in Mozambique. Although, historically, biodiversity conservation in Mozambique has focused on terrestrial habitats and species there is increasing recognition of the value and need to protect both coastal and marine ecosystems, habitats and species.

13. Mozambique's coastal and marine biodiversity strategy identifies three priority objectives: (i) improved protection, management and sustainable use of coastal and marine conservation areas; (ii) increased community participation in coastal and marine resource management and conservation; and (iii) protection and conservation of globally important marine species.

14. Within these, emphasis is placed on improving demarcation and management of Bazaruto National Park and the Maputo and Pomene Reserves, as well as identifying new coastal and marine protection priorities; defining and increasing the role of and flow of benefits to communities in the management, use and conservation of coastal and marine resources; and assessing the current status of as well as implementing conservation plans for globally endangered species.

National Level Support.

15. Commitment for the project is high among the participating agencies. In recognition of the priority accorded to coastal management issues in the NEMP, a National ICZM Program is being developed. A participatory process aimed at defining the program scope, structure and key components has begun, and good initial progress has been made.

* MICOA has established a Coastal Management Unit (CMU) within the Ministry, which is charged with the leading the program development process, and coordinating the actions of the other relevant government and other stakeholders in the process.

* As one of the initial program development activities, the CMU, jointly with DINATUR, coordinated a workshop at Xai-Xai to consider the rapidly escalating problems related to tourism development along Mozambique's southern coast. The Xai-Xai workshop succeeded in creating a constituency among relevant government stakeholders for undertaking an integrated approach to solving the coastal management problems in Xai-Xai, and in other key areas along the coast.

* As a direct outcome of the Xai-Xai workshop, an interministerial working group on coastal management (CMWG) was formed. The CMWG, chaired by the CMU and with membership from other key ministries¹, has developed its terms of reference (TOR) and fits within the broader construct of the NEMP.

* In addition, a commitment was made to broaden the focus of the on-going tourism master planning exercise within coastal zone areas. While this is a project specific activity, it is

indicative of the increasing recognition of the need to overcome the limitations presented by traditional sectoral planning.

* A National Workshop to assess the state of knowledge and on-going research into coastal issues was held in April 1996. The workshop focused extensively upon the state of coastal habitats and the pressures to which these are subjected. Critical habitats and key species including coral reefs, sea grass beds, marine mammals and marine turtles were paid particular attention. A key presentation on the recently developed national strategy for coastal biodiversity conservation was made by a representative of DNFFB and discussed by workshop participants.

* A second National Workshop on Integrated Coastal Zone Management was held in May 1996 to debate the scope and components of as well as the methodologies for arriving at the PNGC. The workshop brought together a range of Mozambican government and non-government stakeholders as well as a selection of international experts to discuss and debate these issues. A methodology for arriving at the PNGC was defined and an action plan for its implementation is being detailed. This methodology emphasizes the involvement of all stakeholders in the program development process ranging from central government agencies, private sector, and non-governmental organizations to local communities themselves. A high-level interministerial steering committee (HLSC) is being created to complement the existing technical-level working group. This committee will provide a mechanism for intersectoral negotiation and ensuring communication of these decisions to the traditional line ministry structure for implementation.

Justification for PDF Grant.

16. From the perspective of global representativeness, diversity, critical habitats, vulnerability and urgency, there is a strong argument for GEF involvement in coastal and marine biodiversity conservation in Mozambique. In terms of coastal biodiversity and ecology, Mozambique is of considerable regional importance. Along with Madagascar, Mozambique is one of the only countries in the East Africa region with major brackish coastal barrier lagoons. Mozambique's coastal waters contain the most extensive seagrass beds as well as the largest remaining populations of the threatened dugong in the Western Indian Ocean. Also, based upon the most recent available information presented by Tinley (1971), Mozambique is the only country in this region where all 5 species of threatened and endangered sea turtles occur and breed. Furthermore, the most extensive mangrove forests in the region are in Mozambique. The country's coral reefs are thought to represent the best coral assemblages along the mainland of the East Africa region (including one of the southernmost shallow corals), moreover these are thought to be in good condition.

17. In addition, the proposed project fits well with the GEF Biodiversity Operational strategy and Operational Program on Coastal and Marine Ecosystems. It is also in line with the guidance given by the first and second Conferences of the Parties to the Convention on Biological Diversity which stresses projects that promote in situ conservation activities as a whole, and coastal and marine ecosystems in particular. It is complementary to other on-going and planned activities, including World Bank/GEF Transfrontier Conservation Areas Project, the proposed UNDP/GEF Western Indian Ocean Coastal Biodiversity Project, and UNEP-led National Biodiversity Strategy for Mozambique. Finally, the long list of sites being considered (see Table 1) from which the 3-4 project sites would be selected fits with the priorities identified within "A Global Representative System of Marine Protected Areas" (GBRMPA et al., 1995).



REPÚBLICA DE MOÇAMBIQUE

MINISTÉRIO PARA A COORDENAÇÃO DA ACÇÃO AMBIENTAL
GABINETE DO SECRETÁRIO-GERAL

Mr. Jean-Paul Chausse

Chief

Agriculture and Natural Resources Division

Southern Africa Department

The World Bank

1818 H Street, N. W.

Washington, DC 20433 USA

28 June 1996

**Subject: Request from the Government of Mozambique for Global Environment Facility
Project Development Funds Block B for the proposed Coastal and Marine Biodiversity
Management Project**

Dear Mr. Chausse,

As you are aware, the Government of Mozambique (GOM) has been working closely with the World Bank to identify and develop a concept for a Coastal and Marine Biodiversity Management Project for which we will request support from both the Global Environment Facility (GEF) as well as several bilateral donors. The proposed project is envisaged to fit within the overall framework of the National Coastal Zone Management Program, which is coordinated by the Ministry for Coordination of Environmental Affairs (MICOA), as well as the more specific framework of the Ministry of

Agriculture and Fisheries' (MAP) National Forestry and Wildlife Program, which is implemented by the National Directorate for Forestry and Wildlife (DNFFB). The project is proposed to have four main components targeting: in-situ management of coastal and marine biodiversity; community-based development in protected area buffer zones; capacity building for coastal and marine biodiversity conservation, and organizational networking and public awareness. This letter is to request assistance in the form of a Block B grant from the GEF Project Preparation and Development Facility (PDF) to prepare the components of the proposed project which are targeted for GEF support.

The PDF grant in the amount of \$ 350,000 is being sought to:

1. Fund a national coordinator of the project preparation process
2. Fund a technical advisor to guide the project preparation process
3. Fund the following project preparation activities:

Overarching activities:

- . Project stakeholder identification followed by definition and implementation of a stakeholder consultation strategy. Stakeholder consultation and participation is a theme that will run throughout project preparation.

Activities supporting identification and preparation of specific project components:

(a) In Situ Management of Coastal and Marine Biodiversity

. Coastal and Marine Protected Areas:

- . Ecological Surveys with the dual purpose of verifying the global environmental significance of the proposed project areas and defining the appropriate boundaries for these areas;
- . Economic assessment of the proposed protected areas with particular emphasis on identifying

- essential capital investment needs and recurrent costs;
- Assessment of capacity building needs for management of proposed coast and marine protected areas.

Marine Mammal and Sea Turtle Management Program:

- Turtle nesting survey to identify the nesting range and areas of concentrated nesting for each of the 5 species found in Mozambique;
- Aerial surveys in the Bazaruto and Inhaca area to determine the status of the known dugong populations as well as that of other marine mammals;
- Radio/Satellite tracking of dugongs.

Sustainable Funding Mechanisms:

- Assessment of options for generating revenues for protected area management on a site specific basis for each of the selected project sites

Legislative and Regulatory Framework:

- Focused studies/assessment of legislative and regulatory framework governing protected areas and endangered species management including (i) identification of the changes that need to be made in the legislation defining protected area boundaries, (ii) clarification and, as appropriate, identification of the need for redefinition of institutional responsibilities with regard to management of endangered species outside of legally mandated protected areas, and (iii) identification of a mechanism for the coordinated management of these species.

(b) Community-Based Management of Biodiversity for Conservation and Sustainable Use

- Socio-economic studies of the communities living within and around the target protected areas, to be undertaken with the participation of these communities. These studies will explore the general

relationship between these communities and the protected areas including the community views of these areas, an assessment of related resource use, identification of alternative livelihood/revenue generating activities and identification of pilot activities.

(c) Strengthening the Human Resources capacity of Institutions Affecting Coastal Biodiversity Conservation and Management;

- . Assessment of training needs at all levels of biodiversity management from park guards and administrators to researchers, planners and decision-makers;
- . Identification of possible exchange programs, twinning arrangements, relevant short courses etc.
- . Identification of topics for courses to be designed and implemented within Mozambique.

(d) Organizational Networking and Information Dissemination

- . Identification of broader biodiversity conservation networks (including those targeting marine mammals and sea turtles) as well as the means of creating and supporting linkages with these.
- . Develop a public awareness campaign strategy.

Other GEF specific activities:

Determination of incremental cost

The GOM Preparation Team, comprised of representative of MICOA, MAP, UEM and MICTUR, will work closely with the World Bank during Project preparation to increase GOM capacity to prepare future projects of this nature.

The proposal Coastal and Marine Biodiversity Project is a high priority for GOM, as will help to meet the objectives of National Environment Management Programme, which was approved by the Council of Ministers in August 1995 and represents Mozambique's master plan for environmental

management. We hope for favorable consideration of this PDF and look forward to hearing from you

Your sincerely,

Francisco Labjã
Permanent Secretary and
GEF Operational Focal Point for Mozambique

c.c. Roberto Chavez
Resident Representative
The World Bank
Maputo, Mozambique

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Annex 1. Possible Sites for Marine Protected Areas

Location		Characteristics	Status	Reference
Maputo Reserve	Game	Freshwater barrier lakes, dune forest, mangroves, dune rock, sea turtle breeding beaches, coral reefs, terrestrial fauna.	Game Reserve, recommended MPA	GBRMPA 1995
Inhaca/Portuguese Islands		One of southern-most fringing coral reefs, extensive seagrass beds, turtles, dugongs sabellariid reef, dune forest	MPA	GBRMPA 1995 IUCN 1990
San Sebastian Peninsula		Sea turtles nesting beaches, flamingo nesting area, cycad populations, undisturbed <i>Brachystegia</i> coast savanna, dune thicket, mangroves	Proposed national park	GBRMPA 1995
Pomene Reserve	Game	Valuable coastal wetland habitat, diverse birds, dolphins, dugongs, and turtles	Protected	GBRMPA 1995 IUCN 1990
Bazaruto Archipelago		Reported to house the last viable dugong pop in East Africa, 4 spp. nesting turtle, whales, coral reefs, seagrasses	Marine National Park, Greater Bazaruto Archipelago National Park, under consideration	GBRMPA 1995 IUCN 1990
Rio Save Mangroves, Zambezi delta/Cheringoma coast/ Buffalo reserve		Extensive mangroves, freshwater swamps, flood plains with important wetland bird and large buffalo populations. Forms part of large complex of protected areas extending up to Gorongosa National park described as "the most complete and viable system in Africa"	Possible World Heritage Site Marromeu is protected and also a potential RAMSAR site	GBRMPA 1995
Primeiras and Segundos Islands		Fringing reefs, nesting green turtles, seagrass beds, mangroves, dune forest and dugongs	Recommended MPA	GBRMPA 1995 IUCN 1990
Nacala-Mossuril		Islands, nesting seabirds, seagrass beds, turtle nesting, fringing coral reefs, good tourism potential	Proposed national park (area includes Matibane forest reserve)	GBRMPA 1995 IUCN 1990
Quirimba Archipelago		Reefs, seagrass beds, turtles, tern colony	Recommended MPA - protection being sought	GBRMPA 1995 IUCN 1990

Items to be Financed

18. The PDF grant would finance technical assistance, National consultants, social assessment and participation, and detailed preparation of the component for protected areas, community management, institutional strengthening and conservation awareness and education, as well as economic and incremental cost analysis.

19. In addition to the requested PDF resources, support will be provided financially and in kind from GOM, Japanese grant facility, European Union, World Bank; WWF International, and the Natal Parks Board. Project preparation activities will also be supported by on-going, complementary initiatives such as the rapid ecological survey for the whole coastline being undertaken by IUCN and the baseline marine biodiversity and resource-use surveys being performed by Darwin/Frontier-Mozambique in the Quirimba Archipelago.

Preparation Costs in (US\$):	Total	US\$ 660,000
	PDF B	US\$ 350,000
	Other Sources	US\$ 310,000

Table 1

Activities	Source of Funds			Comments
	PDF	Other	Total	
Technical Assistance	60,000	20,000	80,000	PHRD
Social Assessment (inc. stakeholder identification and participation strategy)	90,000	30,000	120,000	PHRD, GOM
Planning workshops		70,000	70,000	EU
Preparation Activities:				
In Situ Management of Coastal and Marine Biodiversity	100,000	50,000	150,000	GOM, NPB, WB
Community Management/Use of Biodiversity	50,000	50,000	100,000	GOM, PHRD
Enhancing Management Capacity	10,000	50,000	60,000	PHRD, WB, Tbd
Conservation Networks & Public Awareness	10,000	40,000	50,000	Tbd
Incremental Costs	30,000		30,000	
Total	350,000	310,000	660,000	

Expected Date of Preparation Completion

November 1997

IA Task Manager

Tanya Yudelman (AF1AE)