



**Concept Paper**  
**For Use in Requesting PDF-A under the GEF for**  
**Medium-sized Project on**  
**Climate Change Adaptation**

**Task no.:**  
**USAID Contract no.: 388-C-00-03-00050-00**



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*Prepared for*  
**Nishorgo Support Project**

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***Project Title:*** Coastal Region Forest Co-Management & Stabilization

***Targeted Geographic Area:*** Noakhali, Patuakhali and Bhola Districts

***GEF Focal Area:*** Climate Change

***Relevant GEF Operational Program:*** OP 12 Integrated Approaches to Ecosystem Management

***GEF Strategic Priority:*** EM-1 Integrated Approach to Ecosystem Management

***Duration:*** 5 years

***Estimated Starting Date:*** October 2006 (tentative)

***Financing:*** (to be determined)

***Project Contact Person:*** CCF, Forest Dept, Dhaka, Bangladesh

***Project Summary:*** (rationale, objectives and outcomes)

Bangladesh is particularly threatened by the consequences of global climate change, which are increasingly being felt. As a low lying and densely settled country with an extensive coastline, Bangladesh is home to millions of poor, rural households that live on “chars”, the temporary islands arising from silt deposits near the mouths of major rivers. As the effects of climate change become more pronounced and as population densities and pressures on arable lands, forests and other natural resources increases, Bangladesh needs to move ahead with stabilization of coastal areas in a manner that fully engages the rural poor through assured economic benefits and support for sustainable livelihoods tied to improved natural resource management.

Over the past several decades, numerous efforts have been organized with a focus on the coastal mangrove forests of Bangladesh. The importance of these mangrove forests has long been recognized for the protection of coastal communities and ecosystems against the effects of tidal surges, coastal erosion, cyclones, tsunamis and other natural disasters. At the same time, the Forest Dept has been concerned about the clearance and conversion of coastal mangroves for shrimp farming and encroachment on the mangroves for agricultural production, uncontrolled tourism development and other unplanned, unregulated and most likely non sustainable uses that often failed to take account of

development priorities for local stakeholders and to generate significant economic benefits for local communities. In addition to the lost economic opportunities from the encroachment, conversion and non sustainable use of these mangrove forests, the country of Bangladesh, as well as its neighbors sharing the Bay of Bengal have been adversely impacted by the negative environmental consequences of the continued degradation and destruction of coastal mangroves, including the loss of biodiversity, wildlife habitat, fisheries spawning areas and ecotourism potentials.

The Forest Dept has invested heavily in the afforestation of large areas in the three coastal divisions of Noakhali, Patuakhali and Bhola where 65,658 ha of plantations have been raised with the assistance of the World Bank funded Mangrove Afforestation Project. Forest management plans were also developed with the assistance of the Forest Resource Management Project through a World Bank loan. These plantations have been successfully established in an area of nearly 140,000 ha of coastal forest lands that are in need of improved conservation and management. Millions of people live in this area, which could in principle become a major source area for the sustainable production of fuelwood and small timber. Based on current growth and yield data, the Forest Dept estimates that these plantations could produce more than 650,000 m<sup>3</sup> of forest products per year, and as management extends through the landscape, sustainable production could be doubled. This would be a vital and significant contribution to the country's sustainable supply of wood products, and exceed many fold the current production from the Sundarbans and hill forests. However, at the present time, the management plans are not being fully implemented and the potential production of these forests is not being realized. The end result is unsustainable use and degradation from uncontrolled harvesting, as well as lower overall production and increased pressure on remaining forest areas outside of these mangrove forests.

Over the past several years, the Forest Dept has developed with the support of the USAID funded Nishorgo Support Project a new, collaborative approach to more effectively protect, conserve and sustainably utilized designated Protected Areas. This new approach and co management model has been adopted in the Forest Dept Nishorgo Program for the conservation and management of forest protected areas and the surrounding landscapes in a manner that not only contributes more effectively to biodiversity conservation, but also provides a higher level of economic benefit and alternative income generation opportunities for the surrounding communities and engaged local stakeholders.

The proposed project will help to reduce the pressures for encroachment and conversion of the remaining mangroves forests by addressing the driving forces and root causes of the pressures on the coastal mangroves, namely:

- support for increased local participation in the collaborative management of these forests, in a manner that integrates opportunities for managed, sustainable use in association with poverty reduction in tandem with more effective conservation; local communities would be mobilized through co management councils to assist with the monitoring and control of illegal, unauthorized and non sustainable uses, and in the development of zoning and local forest management plans that provide

- for more effective protection along with increased production that benefits local communities; the existing forest management plans would be revised and updated as forest co-management plans, consistent with the vision and policy guidance of the Nishorgo program and sustainable use of multiple use forests
- recruitment, training and capacity building within the Forest Dept to hire and properly train extension foresters to work with local communities to guide and encourage the adoption of sustainable harvesting methods, site restoration, regeneration and continued afforestation where needed, thinning regimes and other improved silvicultural treatments, environmental conservation measures, forest protection and disease control, and conversion or enrichment of some stands to increase the density of better adapted and more productive species.
  - the Forest Dept would consult with local communities to identify and assess core areas with the greatest need and opportunity for contributing to the conservation of biodiversity; these areas would be demarcated and declared as forest Protected Areas under the terms of the Wildlife Act; ecotourism development and other economic activities that generate alternative incomes and other economic benefits for local communities in a manner consistent with conservation the biodiversity of these forests would be identified and supported through partnerships between the Forest Dept, the private sector and local NGOs
  - facilitation of a landscape approach to management of the coastal mangrove forests that includes the designation of protected core areas of forest reserve along with multiple use buffer zones; managed areas would be monitored for sustainable levels of harvesting that are responsive to local needs, and planning and field level support for both natural regeneration and afforestation of barren and understocked areas would be included in the landscape approach; the objective would be to identify and increase the effective protection of particularly sensitive and critical areas that are important from the standpoint of biodiversity and environmental management, while taking advantage of the production potential from areas that can more intensively utilized as working forests while still conserving their functions in environmental protection (from tidal surges, as spawning areas, etc.) through site restoration, afforestation/ restocking and sustained yield management
  - continued monitoring of forest management planning and implementation activities to maximize the contributions of these coastal mangroves to serve as a carbon sink and to pump carbon from the atmosphere into the ocean and to help regulate greenhouse gas concentrations; periodic monitoring and sampling will measure the extent of organic carbon that is fixed and leached into the ocean; at the same time, the Forest Dept will work with local partners and research institutes to continue monitoring and applied research on ways to maximize the positive influence of coastal mangroves in reducing the vulnerability of coastal communities to the negative effects of natural disasters and to increase their adaptation to the long terms effects of climate change

In sum, this project will give local communities a much greater voice in decision making and in rights and responsibilities for the improved conservation and sustained yield management of environmental and economically important coastal mangrove forests,

while enhancing the contributions of these forests to poverty reduction, biodiversity conservation and adaptation to climate change through integrated ecosystem management.

***Country Ownership / Country Drivenness:***

This proposed project is fully consistent with an emerging national priority for the co management of protected forest areas, as evidenced by the development of the Nishorgo Program of the Forest Department (see [www.nishorgo.org](http://www.nishorgo.org) ). The project takes advantage of lessons learned from earlier investments in mangrove afforestation, and provides a means to contribution to the implementation of key actions outlined in the most important Forest Department strategies and action plans, including for example, the National Biodiversity Conservation Strategy, Environmental Action Plan and Tropical Forestry Action Plan.

The Forest Department is also committed to ensure that the further design, elaboration and implementation of this project will be fully responsive to and consistent with local development priorities, area action plans and strategic priorities for local development as well as energy sector, climate change and disaster preparedness interventions and regional agreements concerning the coastal zone of the Bay of Bengal.

The existing forest management plans for the three targeted coastal divisions include four basic management objectives, which are consistent with the overall goals and scope of this proposed project:

1. to continue the establishment of coastal forest plantations and initiate management of existing ones for their timber value;
2. to protect and preserve areas of environmental value relating to the conservation of biodiversity resources;
3. to integrate people participation in forest conservation and development, and
4. to enhance and promote the recreational and tourism potential of the Division.

***Program and Policy Conformity:***

This is intended to be a medium size project, with initial funding expedited to provide support for increased public involvement in the project design and implementation. UNDP is proposed as the GEF Implementing Agency.

This project builds upon prior investments mobilized through the World Bank, the Asian Development Bank and GEF and is fully consistent with and in conformity with the priorities of the Government of Bangladesh. It complements the GEF funded activities supported in southeastern Bangladesh (Cox's Bazar and Hakakuki Haor)