

**UNITED NATIONS DEVELOPMENT PROGRAMME
GLOBAL ENVIRONMENT FACILITY**

**GOVERNMENT OF INDIA
Project Document**

Project Number : IND/98/G31/A/1G/99
 Project Title : National Biodiversity Strategy and Action Plan
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 Country : India
 ACC/UNDP Sector : 2000 Environment Policies
 Government Sector : Environment
 and sub-sector : Biodiversity
 Government Counterpart : Department of Economic Affairs, Ministry of Finance
 Executing Agency : Ministry of Environment and Forests
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UNDP and cost-sharing	
UNDP/GEF:	US\$ 968,200
Cost-sharing or third-party:	
Total	US\$ 968,200

Summary: This project will assist the Government of India to prepare its National Biodiversity Strategy and Action Plan (BSAP). The BSAP will promote the conservation of biodiversity and sustainable use of natural resources in the country, and will be developed through a participatory planning process involving all major stakeholders. The BSAP will be prepared by facilitating a stocktaking and assessment of information at the state and national level. This information will be analyzed in a participatory manner to develop detailed state and national programmes for biodiversity conservation. Key features of this project include an emphasis on decentralized state level planning, and the use of interdisciplinary working groups to involve all sectors concerned with biodiversity conservation.

On behalf of	Signature	Date	Name and Title
The Government (Dept. of Economic Affairs)	_____	_____	Gajendra Haldea Joint Secretary
Executing Agency (Min. of Environment and Forests)	_____	_____	Nirmal Andrews Joint Secretary
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A. BACKGROUND

A.1 An Overview

India is the seventh largest country in the world with a geographical area of 329 million hectares. Situated at the trijunction of the Afro-tropical, Indo-Malayan and Paleo-arctic realms, India is home to 6.67 % of the global faunal diversity and 12.51 % of the global flora. Surveys have so far identified over 47,000 plant species and 81,000 species of animals. To date, about 17,500 species of flowering plants have been described. Estimates of plant taxa include 6,500 species of algae, 14,500 of fungi, 2,850 of bryophytes and 1,100 species of pteridophytes. Out of 81,000 species of animals, 50,000 insects, 5,050 mollusks, 2,000 fish species, 140 amphibians, 485 reptile species, 1,200 birds and 372 mammal species have been described.

Biodiversity in India is characterized by a high degree of endemism. For example, 4,900 species of flowering plants and an estimated 62% of the known amphibian species of animals are endemic to India. The Western Ghats and Eastern Himalayan regions are among the 18 biodiversity hot spots in the world. India is also an acknowledged center of diversity for crops and domesticated animals. It is estimated that 167 important cultivated species and 320 species of their wild relatives have their origins from the Indian sub-continent.

A.2 Threats to Biodiversity

The vast biodiversity in India is being depleted rapidly. Surveys have revealed that 10% of all plant species and more than 21% of the mammal species are currently endangered. The proximate causes include habitat loss and fragmentation, invasion by introduced species, over-exploitation of resources, industrial and urban waste pollution, modern agricultural practices and deforestation. The ultimate causes encompass the burgeoning population which puts greater pressure on resources, absence of adequate valuation of biological resources at economic and policy levels, inequities in the ownership, management and accrual of benefits from the conservation and use of natural resources.

Genetic erosion has taken place in domesticated species of plants and animals, mainly because of the introduction and promotion of introduced "high yielding" varieties of crops and livestock. As a result, a number of varieties of rice, millets, oilseeds, vegetables, and legumes have been lost, and several breeds of domestic animals are threatened as well. These include three breeds of cattle, seven of sheep, five breeds of goats, five of camels, four of horses and all breeds of poultry.

A.3 India's strategy to protect biological diversity

The Government of India (GoI) has become increasingly aware of various environmental problems including loss of biodiversity degradation. At the national level, environmental protection and sustainable development have emerged as key national priorities in the approach paper to the Ninth Five-Year Plan (1997-2001).

India's various policies related to biodiversity conservation reflect extensive analysis and commitment to deal with the complexities of the situation. There are several legal provisions for the

protection of biodiversity in the country, most importantly the Indian Forest Act (1927), Wildlife Protection Act (1972, 1988), Forest Conservation Act (1980), and the Environment Protection Act (1986).

A number of policies jointly provide a strategic focus to guide biodiversity conservation. The Environment Action Programme (1993) identifies conservation and sustainable use of biodiversity in selected areas as one of its priorities for future action. The National Conservation Strategy and Policy Statement on Environment and Development (1992) delineates biodiversity conservation as an important area for policy-level interventions and provides the basis for the integration of environmental concerns into the programmes of cross-sectoral ministries. The National Forest Policy (amended in 1988), stresses the need to restore the ecological balance and conserve the country's natural heritage by preserving the remaining natural forests. The National Wildlife Action Plan (1972, 1988) addresses the protected area network and development of participatory management systems.

Responsibility for integrating environmental concerns into sectoral plans lies with the Central Planning Commission, which prepares five-year plans to set directions and targets for economic growth. Environmental management objectives recommended in the approach paper to the Ninth five-year Plan include; better planning for sustainable use of resources, protection and conservation of endangered systems through education, training and awareness, coordination among various governmental organizations and involvement of NGOs/CBOs at all stages of environmental planning.

A.4 Prior and on-going activities

National Report

The GEF has already provided funding for the preparation of the GoI's national report to the Convention on Biological Diversity in December 1997. The report will be ready by end March 1998.

Draft BAP

In 1994, the Ministry of Environment and Forests (MoEF) initiated action for the preparation of a National Biodiversity Action Plan. A small expert group was constituted to determine national level objectives and strategies to guide the conservation and sustainable use of biodiversity. This expert group made many recommendations, and identified strategic thrust areas to guide biodiversity conservation in the country. These have been collated into a draft 'Biodiversity Action Plan' (BAP).

The draft BAP was the first step towards formulation of a comprehensive National Biodiversity Strategy and Action Plan which proposes measures to address issues and action points emanating from the Convention on Biological Diversity (CBD). Objectives and strategies proposed in the draft BAP were formulated based on needs and gaps apparent to policy makers at the national level. However, a comprehensive stocktaking and detailed assessment of biodiversity relevant information and its analysis (through consultations) to identify gaps and priorities were not carried

out as part of this process. Consequently, the draft BAP did not identify the opportunities available to address critical issues concerning biodiversity degradation. Neither did it develop measures to address specific threats to biodiversity and ensure its sustainable use. Furthermore, the stakeholders were neither consulted nor were their role delineated. Measures were also not proposed to integrate the conservation and sustainable use of biodiversity into relevant sectoral and cross-sectoral plans, programmes and policies (as required under Article 6 of the CBD). These still remain to be done in order to develop feasible mechanisms for *in situ* and *ex situ* conservation, sustainable use and equitable sharing of benefits.

The Government of India (GoI), through the MoEF, has therefore requested the GEF for Enabling Activity assistance to undertake this broad-based planning process to develop an integrated National Biodiversity Strategy and Action Plan. Due to the dichotomy between the roles of Central and State Governments and decentralized governing arrangements, this process is best carried out at the level of the states. Therefore, the GoI intends that each of the 25 States and seven Union Territories assess their biodiversity resources and develop strategies and plans to ensure its conservation and sustainable use¹. The strategies and objectives outlined in the draft BAP will provide the States with a framework of clearly defined directions and parameters to guide a broad based stocktaking and assessment of biodiversity information. This information will then be organized and analyzed to rank priorities for bio-geographic regions and ecosystems and develop action plans. These strategies and action programmes will then be consolidated into India's National Biodiversity Strategy and Action Plan which would contain measures to attain the provisions and objectives of the CBD.

Biodiversity Conservation Prioritization Project

WWF-India has recently initiated a Biodiversity Conservation Prioritization Project (BCPP) to determine its own priorities for selected sites in India. The primary objectives of the BCPP project are to develop a participatory methodology for setting biodiversity conservation priorities; a critical assessment of the current priorities and strategies for biodiversity conservation and consequent identification of major gaps; and detailed site specific plans for a few priority sites.

As the BCPP project is limited to a few sites within India, the extent to which there is overlap with the proposed BSAP effort is not very significant. Additionally, the BCPP addresses only the biological aspects of biodiversity conservation and does not consider cross-sectoral issues, sustainable use or sharing of benefits. Strategies and actions have been developed for a few pilot sites only. However, methodologies, prioritization criteria and recommendations of the BCPP are of great importance to this project and will be reviewed and incorporated with the cooperation of WWF. To apply lessons learned and experience gained from this project, the participation of WWF will be encouraged in the proposed BSAP project.

National Biodiversity Act

¹ For the purposes of this project document, references to the state level planning teams and state level BSAPs include the seven union territories.

The MoEF is currently in the process of developing a *Biodiversity Act* for consideration by the Parliament. While preparation of the act is still at an early stage, it is expected to contain provisions regulating to the access to genetic resources; equitable sharing of benefits; conservation of endangered species; and protection of biodiversity-rich areas. The parallel preparation of the *Biodiversity Act* and BSAP presents an excellent opportunity to ensure their integration and an effective legal basis for the implementation of the BSAP.

Environment Action Programme (EAP)

The EAP, which is a strategy document that was prepared by the MoEF in 1993 with UNDP assistance, aims to facilitate the integration of environmental considerations into development programmes. Biodiversity is one of seven priority areas identified in this plan, which identifies major issues threatening biodiversity at the national level. To address these concerns, the EAP outlines a number of recommendations that have been subsequently embodied in the draft BAP. The proposed BSAP will further develop the recommendations of the EAP through active stakeholder participation.

Relationship to Existing Legislation

The BSAP will complement the existing *National Conservation Strategy and Policy Statement on Environment and Development* (NCS, 1992) which establishes policy recommendations for both the 'brown' and 'green' sectors. The NCS defines guidelines for governmental action, integration of cross-sectoral programmes and encourages cooperation between the government and NGOs. Although the NCS does not propose specific actions, it emphasizes conservation of biodiversity through a network of protected areas and the sustainable utilization of plant and animal genetic resources.

The National Wildlife Action Plan (NWAP)

The NWAP (1984) addresses the protected area network and development of participatory management systems. It recommends the following approaches towards biodiversity conservation:

- Establishment of a representative network of protected areas.
- Development of appropriate management systems for protected areas.
- Biodiversity conservation within multiple-use areas.
- Extending conservation efforts beyond protected areas.

The above-mentioned policies and plans primarily consider *in situ* conservation of biodiversity in protected areas. Genetic, species and ecosystem diversity have been barely assessed. Correlated with domesticated, aquatic, marine biodiversity, this information is critical to food security, sustainable and commercial use of biodiversity. It is therefore vital to assess and analyze this information to provide input into management and policy decisions across sectors. The project will achieve this goal through a comprehensive process of participatory information gathering and analysis.

National Forestry Action Programme (NFAP)

Several inadequacies and constraints characterize the forestry sector in India. As in all other sectors, population pressure, pervading poverty and insufficient infrastructure affects the forestry sector. The National Forestry Action Programme addresses the problems plaguing the forestry sector by suggesting strategies and a plan of action for sustainable forestry development in the country. The NFAP recognizes the inter-related and multiple roles of forest covering the wide spectrum of environmental conservation and rational utilization for human welfare and sustainable socio-economic development. The methodologies employed in NFAP and mitigation strategies will be studied for possible application to the proposed BSAP.

Eco-development project

This *WB/GEF project* seeks to alleviate pressures on seven globally significant protected areas through improved protected area management and alternative livelihoods for communities. Management plans and implementation arrangements will be analyzed for input into actions for *in situ* biodiversity conservation. The participatory techniques and methodologies employed in this project will be reviewed for possible application to the proposed BSAP.

Other GEF projects

GEF funds have been committed through UNDP for the Gulf of Mannar Marine Biosphere Reserve project (PDF Block B) which aims at strengthening the management of this globally important biosphere reserve. The project will address threats to the biodiversity and development of an integrated coastal zone management plan for the state of Tamil Nadu.

GEF funds have also been committed through UNDP for a coral reef conservation project in the Andaman and Nicobar Islands to develop and implement a management plan for selected globally significant coral reef sites. The management plan will be developed through field surveys and widespread consultations, and will be a prototype for a state level coral reef management plan, besides providing inputs into national plan for coral reefs conservation and coastal zone management.

A.5 Present institutional framework

The Ministry of Environment and Forests (MoEF) is the designated nodal ministry responsible for national environmental policies, programmes and priorities for implementation, and for overall coordination of projects related to biodiversity. Other line ministries such as the Ministries of Agriculture, Science and Technology, and Ocean Development provide necessary inputs to MoEF. The Ministry of Finance is consulted if implementation of environmental policies has an impact on the nation's finances as well as any fiscal incentives or penalties that may be proposed for enabling implementation of the environmental policies. The MoEF is also the focal point for all GEF related matters and multi/bilateral donor funded environment programmes in India.

Appropriate executing agencies and departments in the State Governments carry out implementation of environmental policies and programmes formulated by the MoEF. The State Forest Departments manage protected areas, and are typically the primary field agency for the conservation and utilization of biodiversity. MoEF's role consists of coordinating funds, providing guidance and technical expertise, and undertaking monitoring and evaluation.

To assist the MoEF and the line ministries, there are a number of national as well as state level development institutions, non-governmental organizations, industry associations, and private consultancy firms, etc. Several international organizations, research laboratories, and other such agencies also provide the inputs, as may be required, for decision making to the Government of India.

A.6 Project objective

The main objective of this project is to assist the Government of India to prepare its national Biodiversity Strategy and Action Plan (BSAP).

B. PROJECT JUSTIFICATION

B.1 Problem to be addressed: present situation

The vast biodiversity in India is being depleted rapidly. It is estimated that 10% of all plant species and more than 21% of the 372 mammal species are currently endangered. The proximate causes include habitat loss and fragmentation, invasion by introduced species, over-exploitation of resources, pollution, local climatic changes, industrial development, agricultural practices and deforestation. The ultimate causes include the burgeoning population which puts greater pressure on resources, lack of valuation of biological resources by economic and policy levels, inequities in the ownership, management and accrual of benefits from the conservation and use of natural resources, and absence of a coherent policy framework.

B.2 Expected situation at the end of the project

The duration of the project is two years, at the end of which the National Biodiversity Strategy and Action Plan (BSAP) will be finalized. In the process, there will be adequate capacity building in the participating institutions and organizations at national and state levels to gather data, identify threats and formulate programmes for biodiversity conservation. Since the project will draw on national expertise, and use existing institutional arrangements, it would lead to planning capacity in central and state government departments and concerned institutions. In addition, there will be widespread awareness built amongst the policy makers, institutional and collaborating agencies concerning barriers and opportunities available for critical interventions to mitigate threats to the biodiversity in the country.

B.3 Target beneficiaries

The beneficiaries of this project would include:

- (i) Central and state governments, local authorities that are responsible for policy planning and implementation of activities for biodiversity conservation
- (ii) NGOs, private sector, academia and other institutions that would benefit from increased information and capability to analyze the data available on biodiversity conservation.
- (iii) Local communities and the general public will also benefit by way of formulation of national policies that would facilitate and ensure environmentally sound and sustainable development.

B.4 Project Strategy

The BSAP will be developed through a broad-based participatory planning process. The project will be carried out at two levels. The first level will be the stocktaking and assessment of biodiversity information at the state level, identification of priorities and actions in consultation with stakeholders, NGOs and decision-makers. This would lead to the preparation of decentralized state level BSAPs. The second level will be stocktaking and aggregation of information at the national level, analysis of this information and its reconciliation with the state-level BSAPs.

The project will begin its work with an examination of the draft BAP to delineate recommendations along specific thematic areas to guide the states in gathering information and developing decentralized plans and actions. A common methodology and criteria will be developed for data collection, assessing socio-economic and biological value, conservation status, determining anthropogenic pressure, threat and gap analysis, priority setting, and participatory planning techniques. These methodologies will be employed by all the states to ensure a common approach towards the determination of the state BSAPs, and aid in consolidation of the BSAPs prepared at the state levels.

Concurrent to the state level exercise, a national level stocktaking and assessment and identification of options will be conducted to help in identifying threats that are not apparent at the state level. Issues such as legal and policy framework, intellectual property rights, trade agreements, research and development, biotechnology, *ex situ* conservation, human and institutional capacity, technologies for conservation, cross-sectoral analysis and estimation of costs and needs require a national perspective and cannot be addressed at the state level. Existing studies on valuation of biodiversity and data from primary resource sectors- agriculture, fisheries, forestry, tourism, etc. will be analyzed to estimate direct and indirect use values of biodiversity. The results of the national level assessment and planning process and state level inputs will culminate into biodiversity action plan which would help in the conservation and sustainable use of biodiversity in the country.

The project, with its emphasis on the development of strategies and action plan for biodiversity conservation, will provide the initial thrust for their adoption through capacity building and networking of national institutions and agencies. Training workshops, study tours and consultations, as envisaged under this project, will focus on exposing policy makers, planners and researchers to participatory approaches for developing linkages between state level BSAPs and their complementarity with national efforts and objectives.

Many multi- and bilateral funding organizations are interested and willing to fund biodiversity conservation projects. Through workshops and consultative meetings, this project will provide a forum for such funding organizations to coordinate their funding programmes.

➤ **B.5 Project implementation arrangements**

The MoEF will take overall responsibility for the implementation and execution of the project, and the achievement of its objectives. A Steering Committee will be constituted by the MoEF to oversee the execution of the project. The steering committee will be comprised of representatives from the MoEF (Steering Committee Chair), the Planning Commission, cross-sectoral ministries², including the Department of Economic Affairs, NGOs, prominent experts and UNDP. The Steering Committee will act as the coordinating mechanism for the preparation and finalization of the BSAP, and as such will provide the necessary guidance and oversight to the project implementation. Individual experts may be invited to provide inputs as appropriate to specific meetings. However, the Steering Committee will meet when a quorum of its members is present. The Steering Committee will facilitate cross-sectoral involvement from the ministerial to the community level, review outputs, and ensure that plans and strategies of the BSAP meet national goals and objectives. The Steering Committee will also finalize and approve the number, themes and composition of the national inter-disciplinary thematic working groups (NTWG).

In its capacity as the lead agency, the MoEF will supervise and monitor arrangements for the execution of the project. Since the project will deal with several technical issues at different levels, other ministries, state governments and/or institutions will act as technical counterparts for specific components of the project. The MoEF will be responsible for ensuring:

- (i) Overall project execution and coordination.
- (ii) Coordination with line ministries, state governments, collaborating institutions and government agencies, among other stakeholders.
- (iii) Interaction with various NGOs, research institutions, environmental experts, among others, for effective execution.
- (iv) Involving national institutes having the necessary capabilities for assistance in project execution.

A National Project Director (NPD) will be appointed by the MoEF for the supervision of the project. The NPD, who will be the Joint Secretary dealing with the biodiversity subject matter, will be responsible for the review, monitoring and clearance of the work plan, which forms the basis for project execution. The Steering Committee will establish a Selection Sub-Committee, which will finalize the various contract decisions, and the NPD will be responsible for implementing these decisions. Day-to-day coordination will be the responsibility of the Project Manager, contracted

² The MoEF is currently in the process of setting up a high level committee to review biodiversity matters and facilitate cross-sectoral integration. The committee may be comprised of up to 25 members drawn from central ministries (Agriculture, Mining, Finance, etc.), prominent NGOs and eminent scientists and experts. The feasibility that the mandate of this committee may be expanded to oversee the BSAP process will be explored at the inception of the project by the MoEF.