

Policy Issues in Forest and Biodiversity Conservation in India

Prodipto Ghosh, Ph.D

Distinguished Fellow

The Energy and Resources Institute

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Forests

Importance of Forests:

- The National Environment Policy, 2006 enumerates the importance of Forests in India:
 - Recharging of mountain aquifers, which sustain our rivers.
 - Conservation of soil, and prevention of floods and drought.
 - Provision of habitat for wildlife and the ecological conditions for maintenance and natural evolution of genetic diversity of flora and fauna.
 - The homes of traditional forest dependent communities.
 - Yield timber, fuel wood, and other forest produce.
 - Possess immense potential for economic benefits, in particular for local communities, from sustainable eco-tourism.”

Causes of Forest Depletion and Degradation:

- NEP 2006 also discusses the causes of Forest Depletion and Degradation:
 - The principal direct cause of forest loss is the conversion of forests to agriculture, settlements, infrastructure, and industry.
 - Commercial extraction of fuelwood, illegal felling, and grazing of cattle.
 - These causes have their origins in the fact that the environmental values provided by forests are not realized as direct financial benefits by various parties, at least to the extent of exceeding the monetary incomes from alternative uses, including illegal use.
 - Since antiquity forest dwelling communities had generally recognized traditional community entitlements over the forests, and therefore had strong incentives to use the forests sustainably and to protect them from encroachers.

Causes...

- However, after the commencement of formal forest laws and institutions in 1865, these entitlements were effectively extinguished in many parts of the country.
- Such disempowerment has led to the forests becoming open access in nature - a classic manifestation of the “Tragedy of the Commons”.
- It has also led to perennial conflict between the forest dependent communities and the Forest Department, constituting a major denial of justice.
- The Panchayats (Extension to the Scheduled Areas) Act, 1996; and the relevant provisions of Part IX of the Constitution may provide a framework for restoration of the key traditional entitlements.”

Strategies for Forest Conservation in NEP 2006:

1. Give legal recognition of the traditional entitlements of forest dependant communities taking into consideration the provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 (PESA)..
2. Formulate an innovative strategy for increase of forest and tree cover from the 2003 level of 23.69 percent of the country's land area, to 33 percent, through afforestation of degraded forest land, wastelands, and tree cover on private or revenue lands.
3. Key elements of the strategy would include:
 - (i) Implementation of multi-stakeholder partnerships involving the Forest Department, land owning agencies, local communities, and investors, with clearly defined obligations and entitlements for each partner, following good governance principles, to derive environmental, livelihood, and financial benefits;

Strategies...

- (ii) Rationalization of restrictions on cultivation of forest species outside notified forests, to enable farmers to undertake social and farm forestry where their risk-return-term profiles are more favourable than cropping,
- (iii) Universal adoption of community based practices such as Joint Forest Management, Van Panchayats, in forest management, with assured participation of women, throughout the country,
- (iv) Focus public investments on enhancing the density of natural forests, mangroves conservation, and universalization of community based practices.

Strategies...

(v) Formulate an appropriate methodology for reckoning and restoring the environmental values of forests, which are unavoidably diverted to other uses.

(vi) Formulate and implement a “Code of Best Management Practices” for dense natural forests, to realize the Objectives and Principles of National Environment Policy. Forests of high indigenous genetic diversity should be treated as entities with Incomparable Value.

(viii) De-notify Bamboo and similar other species as 'Forest Species' under the Forest Conservation Act, to facilitate their cultivation outside notified forests, and encourage their productive utilisation in economic activities.

(viii) Promote plantation of only such species as are conducive to the conservation and sustainability of given ecosystems.

Biodiversity, Traditional Knowledge and Natural Heritage

Importance of Biodiversity and TK in NEP 2006:

- Conservation of genetic diversity is crucial for development of improved crop varieties resistant to particular stresses, new pharma products, etc., apart from ensuring the resilience of ecosystems.
- Traditional Knowledge (TK) possessed by local communities, is the basis of their livelihoods, and also a potent means of unlocking the value of genetic diversity through reduction in search costs.
- Natural heritage sites, including endemic “biodiversity hotspots”, sacred groves and landscapes, are repositories of significant genetic and ecosystem diversity,
- Landscapes are also an important basis for eco-tourism.
- Natural heritage sites enable evolution of wild species in response to change in environmental conditions.

Risks to Biodiversity in India:

- Development projects – highways, dams, agriculture, threaten wild species.
- Over-extraction of species leading to degradation of ecosystems
- Isolation of wild habitats leading to homogenous meta-population
- Global demands of agricultural products of limited set of varieties / breeds of domesticated biodiversity
- Lack on IPRs over traditional knowledge leading to commercialization of products of certain species.
- Risks due to LMOs/ GMOs

Strategies for Conservation in NEP 2006:

- Strengthen protection of areas of high endemism of genetic resources (“biodiversity hot spots”), while providing alternative livelihoods and access to resources to local communities.
- Pay explicit attention to the potential impacts of development projects on biodiversity resources and natural heritage.
- In appraisal of such projects by cost-benefit analysis, assign values to biodiversity resources at or near the upper end of the range of uncertainty. In particular, ancient sacred groves and “biodiversity hotspots” should be treated as possessing “Incomparable Values”.
- Enhance ex-situ conservation of genetic resources in designated gene banks across the country. Genetic material of threatened species of flora and fauna must be conserved on priority.

Strategies...

- Harmonize provisions for denial/termination of patents in the Patents Act 1970 with provisions with the Biodiversity Conservation Act, in particular to enable local communities holding traditional knowledge in use of genetic resources to benefit from providing access to such knowledge.
- Formulate an appropriate system for Prior Informed Consent and Fair and Equitable Benefit sharing in respect of biological material and traditional knowledge of use of genetic resources to enable the country and local communities to derive economic benefits from providing access.

These strategies for conservation of forests, biodiversity, traditional knowledge, and natural heritage, reflect both anthropocentric and “Deep Ecology” perspectives.

Actual adoption of legislation, regulations, and programs to give effect to these remain work in progress.

The other speakers in this session will address these questions.

thank you