People and protected areas in India

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Challenges of joint forest management and ecodevelopment.

The protected area (PA) network in India has helped to conserve a significant part of the country's biodiversity. The network of PAs currently covers an area of 8.1 million ha, encompassing about 14 percent of the country's forest area and 4.61 percent of its land mass. From six national parks and 59 wildlife sanctuaries in 1970, the numbers increased to 85 and 462 in 1998, respectively (Wildlife Institute of India, 1998). According to a survey carried out in the mid-1980s, over 65 percent of the PAs were characterized by human settlements and resource use (Kothari *et al*., 1989).

Most PAs in India have a core zone with national park status and a peripheral buffer zone, which can be either a wildlife sanctuary or a reserve forest. Resource use has been restricted to the buffer zones, where it has been regulated, while core areas are completely closed. A 1991 amendment to the Wildlife Protection Act specifies that, in wildlife sanctuaries, the chief wildlife warden must certify that any manipulation does not harm wildlife, and that the manipulation be approved by the state government.

The basic approach to management of PAs has been isolationist, based on the questionable assumption that certain areas are pristine or primary and that management must protect the park from people living in surrounding areas and shield wildlife and other natural resources from exploitation. This is achieved through the strict enforcement of legislation, patrols to prevent illegal activities and infrastructure maintenance. In this scenario, attempts to protect PAs from human intervention by coercion have often led to hostile attitudes of local people towards wildlife management and forestry staff, and sometimes to open conflict.

The need to exclude people from protected areas is in itself debatable. Numerous ecological studies have shown that not all human use is detrimental to wildlife conservation interests. Througout the world, present-day forest quality and biodiversity patterns reflect the influence of past land use practices (e.g. Gomez-Pompa and Kaus, 1992). In fact, in some cases, excluding human activities from ecosystems can actually reduce biodiversity and lead to habitat deterioration (e.g. Hussain, 1996), while certain habitats have improved following human use/habitation (e.g. Western, 1989; Ramakrishnan, 1992).

JOINT FOREST MANAGEMENT AND ECODEVELOPMENT

In recent years there has been a shift towards participatory approaches in forest management and biodiversity conservation. The National Forest Policy (1988) declared that local

communities were to be involved in natural resources conservation. Subsequently, in 1990 the Indian Ministry of Environment and Forests issued a circular for joint forest management (JFM) and resource sharing. The JFM approach seeks to develop partnerships between state forest departments (as owners) and local community organizations (as comanagers) for sustainable forest management. User groups receive usufruct rights only; land is not to be allocated or leased.

Since 1991, the Government of India has committed funds, particularly in the field of PA management, for ecodevelopment (also called integrated conservation and development) and a site-specific package of measures for conserving biodiversity through local economic development. The government has launched ecodevelopment projects in 80 PAs through a centrally sponsored scheme and in seven PAs with World Bank assistance. Two PAs are being supported through World Bank Forestry Research, Education and Extension projects. All the ecodevelopment activities are administered by village ecodevelopment committees (VECs) or forest protection committees (FPCs).

Ecodevelopment integrates environmental and forestry activities with those of other development agencies. Social welfare activities include the provision of drinking-water and irrigation facilities, soil and moisture conservation, fencing, village road-work, health care camps and employment generation for local communities in the vicinity of PAs. These activities have improved relationships between local communities and PA management staff. The PA manager may link existing rural development programmes to conservation projects. Since 1993, land improvements, implementation of land reforms, land consolidation and soil conservation, minor irrigation, water management and watershed development, animal husbandry, fisheries and non-wood forest products (NWFPs) have come under the jurisdiction of the panchayat, the village-level administrative unit.

Ecodevelopment is an attempt to reduce forest dependence and to compensate local communities - in cash and kind as well as through alternative off-farm income-generating opportunities - for the lost access to resources in PAs. The approach acknowledges that people living near PAs may have to bear enormous opportunity costs while deriving few tangible benefits from conservation. It is based on some faulty assumptions, however. Biodiversity conservation is not always compatible with economic development (where tourist inflows and income levels increase, pressures on forest resources usually increase too), and forest dependency is not only economic (forest use is often also a part of cultural and traditional lifestyles). In fact, none of the alternative opportunities tested so far has generated sufficient benefits to dissuade forest-dependent people from going to the forests.

Ecodevelopment in India integrates the provision of social welfare activities, including drinking-water and irrigation, with forestry

Both JFM and ecodevelopment emphasize people's participation in natural resource management through empowerment. However, while under JFM villagers are able to obtain a share of forest produce, wildlife laws prohibit the extraction of forest produce for human use from national parks and wildlife sanctuaries. The scope for linking ecodevelopment with JFM is hence limited, as there is little opportunity for using buffer zones, where these are wildlife sanctuaries, to meet the resource requirements of the local people (Rodgers, 1992).

Ecodevelopment, as interpreted and implemented in India, has some inherent weaknesses:

- Ecodevelopment, by definition under the present legislation, limits local people's participation in the management of national parks and wildlife sanctuaries; people can only be empowered in aspects of development that do not lead to the exploitation of wildlife or forest resources.

- There is a lack of understanding of the concept among forest department officials (particularly field staff) and among local people, who may fear the loss of their rights.

- Participatory rural appraisal (PRA) and rapid rural appraisal (RRA) are widely used but often not properly understood or properly applied. The Forest Department, hierarchical and almost totally non-participatory in its decision-making processes, has difficulty practising what it has only recently begun to preach. Participation is needed to get plans approved but, in practice, it is usually limited to informal discussions.

- The approach has neglected to push for changes in land tenure legislation and agrarian reforms, which could provide incentive to invest in land improvement and conservation. Under the present tenurial arrangements, it has been difficult to involve local people in conservation, since the earlier exclusionary approach failed to develop interest in conservation among local communities.

- Considerable bottlenecks exist at all levels in the funding mechanism. In most cases, PA management does not have financial, managerial and administrative autonomy, and mechanisms for plan approval, procurement of funds, expenditures and controls are unclear. Staff lack the technical skills needed to deal with large budgets and new roles.

- While the list of ecodevelopment activities can be quite comprehensive, it does not amount to a strategy. As a result, the conservation-development linkages are generally weak. Moreover, ecodevelopment has not been able to control land use on the fringes of the PAs, for example the proliferation of tourist resorts on the periphery of Periyar Tiger Reserve and the mushrooming of cement factories on the fringes of the Gir Lion Sanctuary.

- Although the ecodevelopment programme envisages interdepartmental cooperation, the legal, policy and administrative frameworks to achieve this remain hazy.

- Ecodevelopment has expanded the duties of forestry staff, but staff capacities have remained unchanged. In most cases, training programmes are conducted too late, i.e. only after plan preparation and consultations with local people, and training on community-based management aspects is lacking.

- Capacity building of local people remains weak, especially in accounting and managerial skills, institution and team building, and leadership and technical skills such as processing and marketing.

- Poor and marginalized people are often inadequately represented in VECs or, if represented, are unable to influence the decision-making process. The state government orders regarding membership in the VECs usually allow one household representative (Uttar Pradesh and Gujarat) or at least one family member (Maharashtra), but only the West Bengal order provides for joint membership of husband and wife. However, one of the two must represent the household in meetings, and in practice it is usually the husband. There is thus very little scope for women even to attend these meetings.

- Because of the remote areas and difficult conditions, wildlife management does not attract the best staff, and field staff may have difficulty maintaining their sense of commitment. This can threaten the relationship between field staff and local

people (Hobley, 1996).

WAYS FORWARD

The foregoing problems - existing and perceived - and lessons learned in the practice of ecodevelopment also point to ways forward.

The main partners in conservation, the local communities and the field staff, need to be empowered through training and capacity-building programmes. Flexibility in allocation of time and funding is needed at the planning stage. Intensive communication efforts using a variety of media are necessary to create conservation awareness in the villages, to transfer technologies, to build confidence in the participants and to create a spirit of collaboration among PA personnel and village people (CEE, 1997).

It may be unreasonable to expect communities in and around forests to live austerely while other members of the society waste resources. Conservation in key centres of biodiversity stands a better chance of success if natural resource use is treated from a national perspective (Baviskar, 1998).

According to Cernea (1987), resource degradation in the developing countries, incorrectly attributed to common property systems, actually originates in the dissolution of local-level institutional arrangements that were developed to give rise to sustainable resource use patterns. To secure effective and active participation of communities, programmes must restore the local institutions concerned. In addition, institutional linkages with mainstream development programmes need to be formalized.

It should not be assumed that poverty always leads to overexploitation of the natural resource base - in many areas of northern, eastern and northeastern India, the poor have managed their environment sustainably. Conversely, reducing poverty through development activities will not automatically reduce environmental degradation. Different dimensions of poverty, such as social inferiority, vulnerability, seasonal deprivation and powerlessness, are related to environmental change in specific ways and require different policy measures.

Successful, people-oriented conservation projects must address the different resource priorities and requirements among the various sectors of a community. They must establish equitable partnerships so that all stakeholders have equal opportunities to control and manage resources and for receiving their benefits.

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