

Forest, wildlife and watershed management through landscape planning approach in Nepal

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Since the establishment of first national park - the Royal Chitwan National Park (RCNP) in 1973, Nepal has made a significant progress in protected area management. Under the provisions of the National Parks and Wildlife Conservation Act 2029 (HMG-N, 1973) and up to its 4th amendment 2049 (HMG-N, 1993), eight National Parks, four Wildlife Reserves, one Hunting Reserve and three conservation Areas as well as five buffer zones have been established in Nepal. These Protected Areas (PAs) have covered an area of 26,665 sq. km (RBNP extension has not been included here) which is about 18% of the total area of the country. Out of 118 ecosystems identified in different physiographic zones in Nepal, 80 are represented in the PAs. Even though the PA network is not properly represented in the Mid-hills and Siwalik. In addition, most of the PAs are small in size, surrounded by agricultural land and settlements where the habitat of some known flagship species seems inadequate. These circumstances call for the development of productive corridors within the framework of a more holistic landscape planning approach for sustainable biodiversity management.

Development initiatives

In the beginning, emphasis was given to manage PA through strict legal enforcement. Later on, the importance of local peoples' involvement in managing and utilising parks' resources was recognised. The Himalayan National Parks Regulation 2036 was passed by HMG-N in which the existence of local peoples was defined and concessional arrangement for their access in mountain parks' resources have been made. From the fourth amendment of the NPWC Act in 2049 strategies have been taken for local community participation in managing peripheral areas to create alternative forest resources and carry out Integrated Conservation and Development Programmes (ICDP) through declaration of Buffer Zones (BZs) in and around the existing national parks and equivalent reserves categories and declaration of Conservation Area (CA) category. Important provision is the allotment of 30-50% revenue generated from national parks and equivalent reserves directly in BZ development. However, allotment of 100% revenue generated from CA for

implementation of its ICDP was practiced as early as 1985 in the Annapurna Conservation Area Project (ACAP) which was regularised by passing the Conservation Area Management Regulation 2053 (HMG-N 1996).

The Buffer Zone Management Regulation 2052 has made provision for four categories of forest management namely BZ Community Forest, BZ Religious Forest, BZ Private Forest and BZ Forest adjacent to the core areas to create alternative forest resources to reduce the pressure of local community on PAs. The Annapurna Conservation Area Project is regarded one of the most successful programmes and is considered a model in participatory management. The Baghmara and Kumrose Community Forests are role model community forestry initiatives in and around Royal Chitwan National Park. This programme has integrated scientific forestry management with wildlife thereby creating a conducive environment for both people and wildlife. Building on the success of the above mentioned programmes a landscape level- rhino and tiger corridor is to be implemented in the Barandhabhar corridor linking RCNP and the Mahabharat range with financial support from Global Environmental Facility (GEF). Since 1995, Park People Programme (PPP) has also been operational in five Terai and two mountain PAs in a phase-wise manner with financial support of United Nations Development Programme. The PPP is promoting social and natural capital generation for long-term sustenance. An integrated and holistic approach has been adopted for the management of forest resources and community development in the BZ. This includes development and promotion of Eco-tourism, agro-forestry, and income generating green enterprises including nontimber forest products through User Groups in BZ forest and privately owned BZ areas. Besides, it has also been promoting 'forestry initiatives' outside PAs to create additional extended habitats for wildlife. A Corridor Forestry Initiative Working Guidelines has been prepared and endorsed by the Department of National Parks and Wildlife Conservation (DNPWC) and Department of Forest (DoF) for its implementation. These programmes have brought some attitudinal changes and created alternative forest resources in the BZ, which has been helpful to

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forge better relations between the Park and the local communities.

Limitations of legal provisions

Landscape planning approach cannot be achieved in isolation without active participation of local communities. It could be achieved by making them aware of the consumptive and non-consumptive benefits of biodiversity conservation and sustainable environmental management. The existing rules and regulations play a significant role in it. For example, the rules framed under NPWC Act and Forest Act might have a good intention, but create some confusions amongst the users.

The Rule 21 (12) of Buffer Zone Management Regulation 2052 restricts the sale of firewood and timber outside Buffer Zone. This jeopardizes the on-farm forestry activities initiated by local farmers. Selling of surplus forest products should be allowed so that the users could reap some economic benefits and become more proactive towards biodiversity conservation.

Buffer Zone has no provision for environmentally friendly Leasehold Forestry Programme, and this has limited the opportunity for non-consumptive Eco-tourism enterprise which could be an alternative income generating opportunity in such areas where hand-over of BZCF and BZ Religious forest is not technically feasible.

The Buffer Zone Management Rule 24 (7) restricts the sale of surplus driftwood collected by the BZ communities outside of Buffer Zone. This also jeopardizes the community's willingness to collect the driftwood during the flooding season (a case of RBNP). The Warden of concerned PAs do not have the authority to auction the surplus driftwood as per existing Act and Rules.

Size and type of BZ forest to be handed over as BZCF is not clear. The cabinet decision of Baisakh 29, 2057 restricts the handover of contiguous forest to local communities. Also, there is a lack of operational guidelines for forest management in BZ areas. Inadequate technical expertise exists in PAs for BZ forest management and BZCF management. PA staffs are trained more on wildlife and less in forest management.

The allocation of 30-50% revenue in the BZ is spent only for developmental activity; there is no provision to allocate resources for the management of core area. Besides, there is no mechanism for allocation of resources between low revenue earning

and high revenue earning PAs.

Implementation strategy

To materialise the true spirit of biodiversity conservation the need is to shift from the protected area approach to include productive landscape. Nepal has already embarked on the participatory management of forest resources for the last few years. The landscape attributes include; protected areas, buffer zones, community forest, Government forest, sustainable farming systems, wetlands, on-farm forestry systems, but they have to be inter-linked together to create biodiversity landscapes. In order to achieve this goal there is a need to review some of the current policy arrangements. They include:

- Management priority should create a balance between conservation and additional habitat development in collaboration with local community.
- Hand-over policies so far adopted for other forest areas should not be generalised for BZs. In this context cabinet decision of Baisakh 2057 needs to be reviewed to contribute for the creation of productive corridor thereby soliciting support of the local community for conservation.
- Leasehold forestry options should be considered in BZs.
- A sustainable benefit sharing mechanism accrued from biodiversity conservation and from the sale of forestry products has to be developed both for BZ forest as well as those outside BZ
- Human enclaves within PAs such as Rambhori Bhata should be relocated outside Parsa Wildlife Reserve.
- A clear-cut one-door policy should be adopted for the implementation of landscape planning approach.
- Equitable benefit sharing mechanism should be developed for the PA generated revenue both for Core Area Management and low revenue generating PAs.
- PA staff need to be trained in forest management and community participation.
- An operational guideline needs to be framed in

the context of landscape planning approach.

- Mechanism for meaningful interaction amongst all the concerned line departments should be established under the active leadership of Regional Director of Forests to realize the spirit of landscape planning approach.

(1974), 2039/9/2 (1982), 2046/6/11 (1989) and 2050/2/27 (1993), Ministry of Law and Justice, HMGN, Kathmandu, Nepal.

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