Policy Brief

Impacts of Decentralised Governance on Biodiversity: Lessons from Participatory Conservation in Chitwan National Park, Nepal

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Introduction

Nepal's participatory conservation policies and practices are well recognised both nationally and internationally. Such policies were adapted since the early 1980s in the Annapurna Conservation Area Project, one of the protected areas (PAs) in the high mountain region, where local people were actively involved in integrated conservation and livelihood activities. The experience from Annapurna Conservation Area was then gradually replicated in other high mountain PAs followed by similar efforts in the Terai, the low land PAs. Since 1996, a new programme called the buffer zone management programme has been implemented covering 12 PAs across the country. Under the programme, a certain area outside the PAs is designated as a buffer zone where some restrictions are imposed on resource use. In return, 30-50% of PA income is shared with the nearby local communities for their socio-economic development through locally formed buffer zone user committees (UCs) and user groups. The programme has resulted in positive outcomes both in biodiversity conservation and local livelihoods.

Despite these inspiring lessons, there has been continued mistrust among the government officers on the ability of local communities to conserve biodiversity. As a result, the UCs and other buffer zone institutions are not fully authorised in buffer zone management; rather they have been given responsibilities mainly for protection. The current governance modalities, including the authorities and responsibilities exercised by various social actors such as government agencies, international organisations, civil society groups and local communities have been increasingly contested. The role of the Nepal Army in protection of PAs is strongly contested, particularly in the context of the current political transition and the widespread public sentiment against the Army. The indigenous communities around the PAs, members of the buffer zone councils, and some civil society groups have been challenging the continued top down policies and have demanded further decentralisation. These conflicts and contestations are largely the result of the slow pace of decentralization and the continued reluctance of the government authority to fully devolve power to the local communities in managing the PAs and buffer zones.

Policy Conclusions

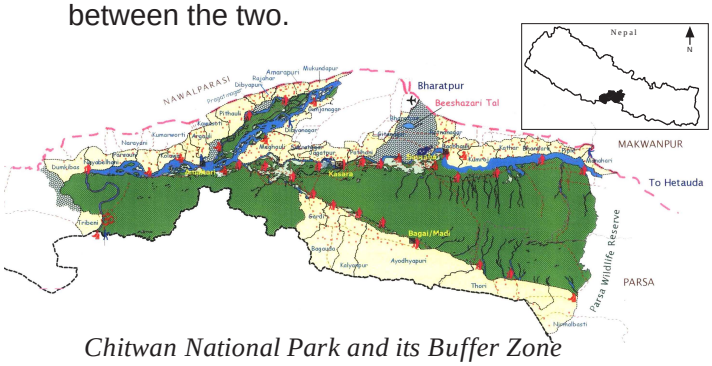
- *Buffer zone community forestry contributes to biodiversity conservation*
- *Local people's involvement in the PA core zone leads to better decision regarding ecosystem management*
- *Collaboration between park authority, security forces, and local people improve protection of the PAs*
- *Local autonomy in mobilising funds enhances both conservation and livelihoods outcomes*

The relationship between ecosystem governance and biodiversity outcomes should inform the PA governance debate. However, there is little documentation and inadequate appreciation of the existing lessons on the impacts of decentralised and participatory practices on biodiversity conservation. In order to enhance our understanding of the relationship between ecosystem governance and biodiversity conservation, ForestAction recently carried out a study in Chitwan National Park (CNP). During this research, the key areas of decentralised practices were identified, their links with biodiversity conservation were explored and the conservation outcomes were assessed. The study is based on secondary information, interviews, observations and the authors' own experience in the field. While some of these initiatives were part of the buffer zone programme, others have been undertaken in an experimental mode, with encouraging results. These lessons may help policy makers and practitioners to reflect upon and adopt better PA management policies. The following sections outline the key conclusions on the link between decentralised governance and improved biodiversity management.

Areas of Decentralized Governance in Chitwan National Park

The CNP introduced a series of interventions to involve local people in conservation. These interventions include: allowing local people to collect thatch grass, organizing periodic public relations meetings with local leaders, implementing the parks and people programme, and finally the buffer zone management programme. Decentralised decisions and actions are being promoted in several aspects of ecosystem management, especially in the buffer zone. Moreover, local communities are increasingly involved in some decisions regarding the management of the core area. Several verifiable positive impacts have been observed from these initiatives. However, many of these initiatives are not codified in legal documents and are practiced only at an experimental level. This section synthesises some of the critical lessons out of these initiatives which are expected to inform the wider policy debate regarding PA governance in Nepal. Table 1 presents a brief description of the specific areas of decentralization, assesses the conservation outcomes of these initiatives and explains the links between the two.

Chitwan National Park (CNP), established in 1973 as the first national park in Nepal, has a 932 sq. km core zone and a 750 sq. km. buffer zone is also a World Heritage Site. CNP has rich sal (*shorea robusta*) forests and riverine grassland. It is the habitat of rhinos, tigers, crocodiles and several other animals and birds. Its buffer zone is comprised of forest patches, farm lands and settlements of over three hundred thousand people. A large part of the local residents, especially the indigenous and *dalits* (lower caste people based on Hindu caste system) are either poor or landless.



Chitwan National Park and its Buffer Zone

Table 1. Areas of Decentralization and their Impacts on Biodiversity Conservation in Chitwan National Park

Areas of decentralisation	Conservation outcomes	Ways decentralization has led to better conservation
Community forestry Local communities are authorised to manage buffer zone forests	Increased forest regeneration in buffer zone	Increased ownership, collective decisions, compliance with rules, regular monitoring, leading to planting, protection and sustainable use
Tourism management UCs are empowered to promote and manage tourism and enjoy its benefits	Improved ecosystem, increased wildlife movement in buffer zone	Tourism related benefits encouraged people to protect, conserve and regularly monitor the forests, illegal extraction and poaching have been minimized.
Drift wood collection Communities are allowed to collect and distribute the drift wood from floods	Increased supply of forest products reduced pressure on the park	Collective management of drift wood from floods led to increased availability and equitable distribution of fuelwood.
Grassland management UCs are given authority to manage the thatch grass collection process.	Increased availability of green grass for ungulates and decreased illegal extraction of other forest products	UCs regulate the entry points, collect entry fees and monitor the collection process to ensure proper collection. Organised and systematic management of grass collection has minimized illegal extraction.
Rhino translocation Local communities are involved on decisions regarding rhino translocation from Chitwan to Bardia	Balanced population of rhinos across the park	Community decisions were more scientific than bureaucratic; rhinos were selected from areas with high density resulting in a balanced population across different areas of the park.
Wildlife protection Buffer zone UCs are allowed to form and mobilise local groups against poaching.	Rhino poaching was reduced in 2004-2006 in Nawalparasi (western sector of the park)	UCs have formed sub-committees for anti-poaching campaigns and mobilized youths and children, resulting in increased public support against rhino poaching.
Security arrangement Local communities are involved in reinstating security posts	Decreased illegal extraction including poaching	Local knowledge became useful in identifying strategic locations for security posts. Local people provided moral and physical support in anti-poaching activities including constructing security posts.
Sharing and mobilising funds UCs are allowed to plan and implement development activities by mobilising buffer zone funds	Buffer zone forests are conserved, illegal extraction decreased,	Decentralized management of buffer zone funds has led to increased participation in development and conservation activities. There are however several areas where the UCs have felt that they have not been given enough autonomy in mobilizing the funds.
Autonomy in fund management UCs are encouraged to seek and mobilize external funds	Improved management of wetland biodiversity	Some UCs have been able to mobilise external funds for conservation activities. For example, Mrigakunja UC received support form GEF Small Grant Programme for the management of Beeshajari Tal, a Ramsar Site.

Table 1 has identified several areas of decentralized ecosystem management, mainly in the buffer zone. These include community forestry, management of drift wood from floods, mobilization of funds for management of the buffer zone and other external funds, management of ecotourism, etc. Although the buffer zone regulation allows local participation only in the buffer zone, in recent years CNP authorities have involved local communities in some areas of core zone management. As described in the table, local communities have participated in grassland management and rhino translocation. The following key conclusions can be made from the range of initiatives that are practiced in CNP.

Buffer Zone Community Forestry Contributes to Biodiversity Conservation

After the implementation of the buffer zone programme in 1996, local communities were allowed to manage buffer zone natural resources such as forests, gazing lands, drift wood brought by floods, sand and stones. Over 27 buffer zone community forests were handed over by 2006 (DNPWC, 2006). The communities have adopted collective decisions, followed mutually agreed rules and norms, regulated forest resource use, and carried out regular monitoring. Decentralized management has increased feelings of ownership and moral responsibility for sustainable use among the local communities. Economic benefits from ecotourism management have provided incentives to some of the communities in promoting and managing ecotourism that includes conservation and better management of community forests to attract visitors. Forests are conserved through protection measures, plantations and sustainable harvesting. These are reflected in forest regeneration, increased forest cover along with improved habitat for wildlife, and increased forest products availability (UNDP, 2004).

Local Involvement Results in Ecologically Sound Decisions on PA Management

Local communities are also involved in managing the core zone ecosystem including grassland and rhino translocation. For the last few years, UCs have been given authority to manage the grassland collection process. This has increased the sense of responsibility so that they have effectively devised a mechanism against any illegal extraction including hiding of fuel wood inside thatch grass bundles.

Similarly, local involvement in rhino translocation has resulted in maintaining a balanced rhino population across the park. As per their decision rhinos were selected from the western sector where the rhino population was relatively dense and were translocated to Bardia National Park. Previously, the park authority decided the matter only considering the transportation costs without due consideration of the spatial balance of the rhino population. Because of the low translocation costs the rhinos were often selected from the eastern sector despite their low density there.

Local Involvement in Security Arrangements Leads to Effective Park Protection

Traditionally, security arrangements for the protection of the park were regarded as sensitive issue and used to be decided solely by the senior officers of the conservation authorities and Nepal Army. The continued rhino poaching from the CNP during and immediate after the political conflict however, brought the park authorities, the Nepal Army and local communities together on this issue. They planned and implemented security arrangements leading to effective protection of flora and fauna. Local communities were involved in improving the security arrangements including decisions on suitable locations for security posts. They were directly involved in constructing the security posts. They have contributed in providing information to the security forces in order to nab poachers. All these activities have resulted in reduced illegal extraction of park resources including poaching of rhinos and other wildlife species.

Local Autonomy Enhances Conservation

Buffer zone UCs are allowed to plan and implement various development activities through mobilization of buffer zone funds. In some cases they are even allowed to seek and mobilize external funds. These funds are used for planting in degraded lands, fencing against grazing, promotion of alternative energy use and supporting alternative livelihood options, all contributing to biodiversity conservation. Although buffer zone rules put several restrictions in setting their agenda and in resource allocation, the UCs have been able to contribute to the conservation process using the limited opportunities for involvement. Additional autonomy to the UCs may further enhance their performance.

Policy Recommendations

The following four policy recommendations are made based on the above conclusions:

Explore more ways to involve local communities in managing the core zones.

The experiences from CNP demonstrate that local people can be effectively involved in various aspects of core zone management in order to ensure ecologically sound decisions and practices. The case has challenged the continued distrust on local people's ability in managing PA core zones. This suggests that PA authorities should explore additional areas where the local communities can better contribute towards effective ecosystem management.

The PA authorities and local communities should forge meaningful collaboration for effective protection

In the CNP case, local people's involvement has enhanced protection of the PA, which challenged the conventional notion of PA security that used to rely solely on armed guards. The case shows that effective protection of the flora and fauna broadly rests on the functional collaboration among the PA authorities, armed forces and local communities. It also helps nurture a broader sense of ownership and responsibility in conserving biodiversity.

User committees should be given further autonomy to seek and mobilise funds

Experience from the CNP demonstrates that local autonomy in mobilising buffer zone funds and seeking externally available funds enhances both conservation and livelihoods outcomes. Any legal constraints should be removed and the regulatory framework should be relaxed to provide the local people with adequate autonomy to mobilise buffer zone funds and seek external funds according to their own planning.

PA governance should be further decentralized to improve biodiversity conservation

The decentralization initiatives in CNP have positive effects on enhancing local participation, mobilising local resources, increasing the sense of ownership among the local people and changing their behaviour towards conservation. However, there are a number of areas where the experimental level of decentralised decisions and actions can be promoted, coded into legal documents and institutionalised into practices. Further authority can be devolved to communities and their institutions not only in managing the buffer zone affairs but also in managing ecosystem in the core zone.

References

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UNDP, 2004. Impact Assessment of Buffer Zone Programme in Nepal. Kathmandu.

ForestAction Nepal is a Kathmandu-based NGO specializing in participatory and policy oriented research on natural resources and livelihoods. It carries out participatory action research projects on diverse issues such as environmental governance, biodiversity conservation, forest management, protected areas, and rural livelihoods. It strives for linking research with the policy process through publications including the *Journal of Forest and Livelihoods* and wide ranging research papers, policy briefs, articles and books.

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