

Community involvement in conservation: An assessment of impacts and implications in the Annapurna Conservation Area, Nepal

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Abstract

Nepal has established an extensive network of protected areas to conserve biodiversity. Several problems relating to management of these protected areas have emerged, such as wildlife poaching and park-people conflicts. To address these problems, local communities have been given more responsibilities in protected area management by creating new categories of protected areas. This research investigates the success of such an approach from the perspectives both of biodiversity conservation and the livelihoods of local communities.

The perceived success of a community-based protected area management was examined in the Annapurna region, Nepal. An integrated biophysical and social survey was designed and carried out for a stratified sample village communities. A field site sampling strategy was designed to examine the effect of two factors: conservation legislation, referring explicitly to establishment of the protected area, and tourism. To evaluate the impact of legislation, areas both inside and outside the protected area were compared. In addition, areas with and without tourism within the protected area were analysed. A biophysical survey was conducted to assess the present status of wildlife and forest resources, and current pressures on forest resources. This was achieved by assessing the intensity of anthropogenic disturbance in forest stands.

A complementary social survey using various tools such as PRA, structured interviews, semi-structured interviews and questionnaire surveys was conducted in 14 village settlements. The questionnaire survey measured the economic losses due to crop damage and livestock depredation by wildlife. The structured interviews gathered information on conservation awareness, local attitudes toward conservation, resource use patterns, effectiveness of the conservation area regulation, relationships between people and the protected area and perceived benefits of conservation. Various participatory tools such as social mapping, seasonal calendars, and matrices were also used to gain further insights into biodiversity conservation.

The results indicate that significant differences, particularly in forest structure, exist between the protected area and areas lying outside. Higher basal area, higher species diversity, higher species richness and low cut stumps number indicate improvement in forest conditions. Local communities have effectively controlled hunting. Therefore, it is evident that wildlife populations are stable, if not on the increase. The results suggest that there has been significant reduction in use of fuel wood. The involvement of local communities in conservation tends to reduce poaching and indiscriminate use of resources, particularly fuel wood. The results also demonstrate that, at present, there has been no significant negative impact of tourism on forest resources and wildlife populations in ACA.

The community-based approach was successful in involving an overwhelming majority of local communities in conservation. The observed differences with local attitudes towards conservation are found to be significant. It is evident that local communities have perceived positive changes in their village settlements. There is a promising collaborative relationship between local communities and conservation authorities. As a result, there is a significant development in local institutions. The conservation regulation has devolved enough management authority. It is evident that awareness of and compliance with the regulation should be increased. Examination of the costs and benefits of conservation suggests that although benefits at the community level are high, costs due to crop damage by wildlife at the individual household level are found to be critical. Tourism is found to be an opportunity for conservation of the area. Considering the impacts and implications, this work concludes that the community-based protected area management approach is not a panacea for the success of a national park. Nevertheless, it could be a good alternative to a national park in many situations, particularly in developing countries.

Notes to readers

This is an abstract of a Ph.D. thesis.

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