

Status Paper of Kanchenjunga Conservation Area

Fanindra R. Kharel

Department of National Parks and Wildlife Conservation

Abstract

The Kanchenjunga Conservation Area (KCA) has been declared recently with the aim of ensuring the sustainable, productive use of natural resources by local people concomitant with the protection of threatened habitats and species through the establishment of a system of community participation in natural resource management and conservation.

Transhumant pastoralism, whereby herders migrate with cattle or sheep herds according to season from low to high altitude pastures and back is one of the most important economic activities practised by the people within the KCA, and a major source of income. A management model that neglects biodiversity conservation interlinked with pastoralism could result in a deterioration in the condition of existing grazing lands and rangelands. To address this problem, a two-week exploration trip was made to temperate and alpine zones within the KCA. This paper highlights the findings of the trip. Potential solutions discussed here emphasise the need for the KCA to organize participatory research programmes to address rangeland resource management issues.

Background

The Kanchenjunga Conservation Area (KCA), located in Taplejung District in north-eastern Nepal, was formally declared by the His Majesty's Government of Nepal (HMG/N) on July 21, 1997 (HMG/N 1997a). A total of 1,700 sq.km of the Kanchenjunga massif and the watershed located in Taplejung District was included in the KCA. Later, the Conservation Area was extended to 2,035 sq.km to include areas covered by the Olancung-Gola, Lelep, Tapethok, and Yamphudin Village Development Committees (VDC) of Taplejung District, which was notified by HMG/N in the Nepal Gazette of September 14, 1998 (1998).

The altitude of the KCA varies from 1,200m along the banks of the Tamor River at Chiruwa, to 8,586m at the top of Mt. Kanchenjunga, the third highest mountain in the world. The KCA contains a dramatic landscape including 11 mountain peaks over 7,000 masl and some of the world's largest glaciers. The KCA is bordered by the Sikkim State of India to the east and the Tibetan Autonomous Region of the Peoples' Republic of China to the north. As a result of its strategic location, the KCA provides an unparalleled opportunity for trans-boundary conservation.

Because of KCA's location directly north of the Bay of Bengal, it receives comparatively more rainfall from the summer monsoons than other parts of Nepal. As a result of its climatic conditions, combined with steep elevation gradients, it supports a great diversity of plants and wildlife habitats. There are at least 2,500 species of flowering plants, including many varieties of rhododendron growing up to 4,000 masl and rare forests of larch, juniper, fir,

oak, birch, and bamboo. The wildlife in the area include snow leopard (*Uncia uncia*), musk deer (*Moschus chrysogaster*), Himalayan black-bear (*Selenarctos thibetanus*), wolf (*Canis lupus*), blue sheep (*Pseudois nayaur*), ghoral (*Nemorhaedus goral*), serow (*Capricornis sumatraensis*), and common leopard (*Panthera pardus*) etc.

Although KCA accounts for nearly 60% of the land area of Taplejung District, less than two per cent of the total area of the KCA can be classified as arable. About 5,000 people inhabit the fertile bottom land and steeper hillsides of the region's four main river valleys: the Tamor, Ghunsa, Simbuwa, and Kabeli. The KCA's rich mosaic of ethnicity includes Limbu, Rai, and Bhotia as well as various Hindu castes. The area contains a number of culturally significant landmarks including centuries-old Tibetan monasteries and sites of Hindu pilgrimage.

The people of Kanchenjunga combine traditional agriculture, pastoralism, and trade to survive. Transhumant pastoralism is practised by Tibetan, Sherpa, and other ethnic groups (from outside the KCA) in the upper parts of the Simbuwa, Ghunsa, Tamor, and Kabeli river valleys within the KCA. They process dry cheese, clarified butter, and sheep's wool for sale. High altitude pasture is regulated as a common property resource. Access to summer pasture lands is regulated by the respective VDCs. Grazers pay a grazing fee to the VDCs and the VDCs use the collected fees to finance other development activities, including trail improvement, within the VDC boundary.

Grasslands: Status and Use

Transhumant pastoralism is a very important economic activity within the KCA and the major source of livelihood. In this context, the sub-alpine and alpine zones used by the herders for summer pasture within the KCA can be considered as rangeland according to the definition: "land on which the native vegetation is predominantly grasses, grass-like plants, forbes or shrubs" (Valkeman 1998a). Similarly the sub-temperate and temperate zones used by pastoralists within the KCA fall in the category of grazing land (synonymous with pasture land): "a collective term that includes all lands having plants that are harvested by grazing without reference to land-tenure, vegetation types, and management practices" (Valkeman 1998b).

Rangeland Management Issues

A growing local population, poaching of wildlife, shortened cycles of swidden (slash and burn) agriculture, and encroachment on forests combined with transhumant pastoralism are potential threats to the KCA's ecosystems. However, transhumant pastoralism is a very important economic activity within the KCA and the major source of cash income. The importance of keeping livestock is not likely to decrease.

Movement of a relatively large number of sheep and cattle herders was observed by the KCA's Project Manager during the two-week field trip to the alpine and sub-alpine zones of Olangchung-Gola, Lelep, and Yamphudin in July 1998. From interviews with the herders, it was clear that many came from outside the KCA for summer pasture.

Frequent use of the same traditional pastures in the alpine zone and forested areas of the temperate zone by transhumant herders has a potential negative impact on forest regeneration in the mixed broad-leaved forest of the temperate zone. For example, the lower part of the temperate zone, with a dominance of mixed-oak forest, is under double use pressure. In summer, low altitude cattle go up to this zone to graze and in winter high altitude cattle come down to the zone to graze.

Research Gaps/Needs

It is difficult to assess any overall changes in the condition of resources resulting from the impact of grazing in the KCA because of lack of data. No research has been carried out by the KCA management authority on the identification of the grazing area; identification of users and their grazing area management practices; or preliminary assessment of the condition and biodiversity situation of the grazing areas within the KCA.

An ecological site description should be prepared by organizing a research study to assess the impact of grazing on KCA's biodiversity, both to improve the socioeconomic situation of the grazing area users and to ensure sustainable grazing area management. It has been recommended that participatory research programmes are organized to address the issues of grazing land and rangeland resource management in the KCA.

Management Recommendations

The KCA has the established objectives of sustainable, productive use of natural resources by local people, and protection of threatened habitats and species. Ensuring the sustainable use of rangeland and forest resources is a pre-condition for local development.

As one of KCA's management objectives is to conserve biodiversity by minimising the impact of grazing on vegetation and wildlife, grazing area management should be introduced through formal grazing user groups, to protect use rights and to increase conservation awareness through collaborative management. Community-based grazing user groups should be initiated and established in all VDCs within the KCA through formation and mobilization of Conservation Area Management Committees (CAMC). These should ensure that biodiversity conservation receives its proper place in the system of rangeland management. The returns include the protection of watersheds and wildlife habitats and conservation of biodiversity, while optimising the economic benefits of the livestock herders through grazing area management. To achieve these multiple objectives, the KCA authority should introduce a concept of joint grazing area management through the development of a forum for collaboration between herders and the KCA management authority.

As one of KCA's management objectives is to conserve biodiversity by minimising the impact of grazing on vegetation and wildlife, grazing area management should be introduced through formal grazing user groups, to protect use rights and to increase conservation awareness through collaborative management. Community-based grazing user groups should be initiated and established in all VDCs within the KCA through formation and mobilization of Conservation Area Management Committees (CAMC). These should ensure that biodiversity conservation receives its proper place in the system of rangeland management. The returns include the protection of watersheds and wildlife habitats and conservation of biodiversity, while optimising the economic benefits of the livestock herders through grazing area management. To achieve these multiple objectives, the KCA authority should introduce a concept of joint grazing area management through the development of a forum for collaboration between herders and the KCA management authority.

References

- HMG/N (1997a) 'Declaration of Kanchenjunga Conservation Area'. *Nepal Gazette* 2054/4/6. (in Nepali)
- HMG/N (1997b) Boundary Amendment of Kanchenjunga Conservation Area'. *Nepal Gazette* 2055/5/29 (in Nepali)
- Valkeman, G. (1998a) *Grazing Area Management Working Plan 1997-2000*. Natural Resource Management Series vol. 6. Kathmandu: The Makalu-Barun Conservation Project
- Valkeman, G. 1998b. *Grazing Area Management Orientation Training*. Natural Resource Management Series Vol. 7. Kathmandu: The Makalu-Barun Conservation Project