

Current problems of Nepal protected areas

V. BÁTORA

*Institute of the High Mountain Biology, University of
Žilina, Tatranská Javorina 7, SK-059 56 Slovak Republic*

Introduction

In the past, Nepal has participated in several major conferences on the environment. These were: the first international conference on the Rational Use and Conservation of the Resources of the Biosphere in 1968 in Paris; the United Nations Conference on the Human Environment, known as the Stockholm Conference, in 1972, the United Nations Conference on Environment (Earth Summit) in Rio de Janeiro, Brazil, 1992; and the World Summit on Sustainable Development, Johannesburg, 2002. With a close commitment to international conventions and treaties, Nepal has shown its keen interest in the sustainable management of natural resources. In the past, Nepal has participated in several major conferences on the environment. These were: the first international conference on the Rational Use and Conservation of the Resources of the Biosphere in 1968 in Paris; the United Nations Conference on the Human Environment, known as the Stockholm Conference, in 1972, the United Nations Conference on Environment (Earth Summit) in Rio de Janeiro, Brazil, 1992; and the World Summit on Sustainable Development, Johannesburg, 2002. With a close commitment to international conventions and treaties, Nepal has shown its keen interest in the sustainable management of natural resources.

Nepalese government initiative and its position on the need for sustainable development

The most important policy documents and plans for sustainable development solutions in Nepal are:

- 8th five year plan 1992 - 1997: the task of poverty alleviation, with emphasis on environmental protection;
- NEPAAP I and II (Nepal political and environmental action plan): Plan of environmental strategies and policies for industry, forestry and water management. Began to form in 1993, was completed in 1996 and ratified in 1998;
- APP (Agriculture prospect plan): agricultural plan, operational since 1995, aimed at increasing productivity and reduce poverty by increasing

land ownership for agricultural development and the development of the paper industry;

- 9th five year plan 1997 - 2002: the sole aim was to reduce poverty through substantial growth in social expenditure and through programmes for disadvantaged groups. The NPC (National Planning Commission) developed the plan;

- National Strategy for the Conservation of NCS (National Conservation Strategy), current in 1998. Its aim is to preserve natural and cultural heritage, meet basic needs with an emphasis on conservation of biodiversity and ecosystems. Prepared for the NPC by IUCN;

- Master Plan for Forestry MPFF, introduced in 1999 with a view of 25 years, the essence of this plan lies in the sustainable use and management of forest. Prepared by the NPC in collaboration with several foreign firms;

- NBAP (Nepal Biodiversity Action Plan), effective since 2003 with a view to 2012, the major challenges of this plan are to address the objectives of the Convention on Biological Diversity in Nepal (Nepal Biodiversity Strategy 2002, WWF Nepal Strategic Plan 2006).

History and development of protected areas in Nepal

Nepal has a relatively short history of protected areas. In the past, sites for hunting reserves (hunting reservation) were earmarked in some areas of the country. The concept of conservation of natural resources first appeared in 1950 and the preservation of law and protection of wild animals put into force seven years later. A slightly more efficient bill from 1959 on the protection of water and wetland flora was adopted in 1961. The law prohibits the use of poisons, explosive materials, destruction of dams, bridges or any activities that could jeopardize the lives of aquatic animals and capture them with the intention of killing. In 1964 a sanctuary for small rhinos was established in Chitwan for the protection of the Indian rhinoceros (*Rhinoceros unicorn* Linnaeus, 1758) prior to hunting and killing the population. Proactive protection provided a trained military component, known as Mr Gaidis Gast (Rhino Guard).

In 1969, the Law on the Protection of Nature was added to the legislation which included six newly established Royal reserves in the Terai area (southern, across the lowlands of Nepal) and a mountain area. In 1970, His Majesty King Mahendra approved the establishment of two national parks: Royal Chitwan and Langtang. In 1973, concepts such as nature conservation, protection or conservation of wild animals (wildlife conservation), national park

reserve to protect species and areas gradually became established in law. The concept of security (buffer) zones was gradually promoted. These were defined as areas adjacent to protected areas in which the use of natural resources is partially restricted. For the local rural population this means limiting agricultural activities to other parts of the land which gives them a valuable contribution (MacKinnon *et al.* 1986). The concept of protected areas buffer zones is well developed in Nepal in recent years. DNPWC first proposed the concept of buffer zones in 1984. Some of them entered into force 10 to 15 years later, some have been enacted recently.

There are now 16 protected areas in Nepal currently covering nearly 20% of the area of the country: eight national parks, seven reserves and one hunting reserve. The Royal Chitwan National Park and Sagarmatha National Park were incorporated into the list of World Heritage natural sites, and also endangered species of flora and fauna by UNESCO World Heritage Committee. A Nature Reserve is included in the list of wetlands of global importance. A National Park is legally defined as a protected area; the sense of protection is to protect ecosystems from the adverse and negative effects of recreation and tourism management.

Conflicts between local people and protected areas

Most protected areas are situated on public places and places on private land; therefore management of protected areas is quite complicated. Public spaces are used as pastures; forests are used for foraging, logging and hunting wild animals and wet fields for fishing. Residents have no right to use these resources by legal consequence, but this leads to conflict once the area is included in a conservation area.

Active habitat conservation in protected areas leads to encouraging the growth of wild animal populations in these areas. Growth outside may be counterproductive in respect to local people. The relationship between protected areas and the human population is unbalanced when animals become pests or exhibit disruptive behaviour. Damaging crops, injury and death is the harassment of residents, leading to cattle-rearing and hunting (Heinen 1993, Shrestha 1994, Studsord and Wegge 1995, Sharma 1996).

Local people once had free access to areas today covered by protected areas, thereby losing the opportunity to use resources that meet their needs. Today, these areas require legal input. People are therefore associated with a national park that the government denied them access and rights to their traditional use of natural resources. Protected areas become the target of illegal activities, such as illegal hunting and felling of the forests (Milton and Binney 1980, Mishra 1982). With the creation of reservations for nature conservation people were denied the right to exploit resources. Compensation for damage caused by wild and protected animals is not accessible to these people.

These conflicts require resolution. Therefore several plans and programmes of many it were created at different levels through funds, grants, subsidies or voluntary activities for sustainable management in protected areas where local communities are involved.

Examples of these projects include:

- Open Society Institute Youth Action fund - project with a focus on environmental education and promote access to use of modern technology, using knowledge and skills of adolescents. Meanings are in the motivation and inspiration of Nepalese youth groups to find dedicated young people who could affect a large number of their peers. So far this project is open to applicants who reside in the territory of the Republic of Nepal and are 15 to 29 years old. Currently, only five areas of Nepal.
- VEEP Nepal- (Volunteers Environmental Education Program) volunteers for the environment and environmental education program: This program is designed to inform the public about the needs of conservation. The program includes teaching natural science in local schools and other institutions and in the vicinity of the manual - an educational method, for example. organic waste disposal, recycling paper, building latrines, clearing under a forestation.
- Local residents projects who seek to cultivate indigenous trees and vegetation

The cause and rate of loss of mountain glaciers and its impact on protected areas of Nepal

Another alarming problem of protected areas is climate change, which also has an association with human activities. The loss of mountain glaciers is generally caused by global warming, which is a result of the greenhouse effect.

Seasonal or other melting of glaciers in the mountains is a natural annual phenomenon. This water supplies the most important rivers flowing through the entire South Asian region. The current warming is causing excessive melting of mountain glaciers, leading to increasing water levels of rivers and causing flooding and bank erosion. Himalayan glaciers provide the water supply for seven major rivers of the region: the Ganges, Indus, Brahmaputra, Salawin / Nu Yangtze, Mekong, Yangtze and Huang He, where there are more than two billion people, a third of the human population. Were they to thaw it would have disastrous consequences (WWF Nepal Program 2005).

As a developing country, Nepal contributes only a tiny part to global warming. Nepal emits less than 0.025% of global greenhouse gas emissions but is likely to be one of the countries that will be most affected by the impacts of climate change. This is a global problem.

References

- Heinen, J.T. 1993: Park-People Relations in Koshi Tappu Wildlife Reserve, Nepal: A Socio-economic Analysis. *Environmental Conservation*, **20**: 25-31.
- MacKinnon, J, MacKinnon, K., Child, G. and Thorsell, J. 1986: *Managing Protected Areas in the Tropics*. IUCN, Gland, Switzerland and Cambridge, UK.
- Milton, J. and Binney, G. 1980: *Ecological Planning in the Nepalese Terai Threshold*, International Centre for Environmental Renewal, Washington, DC.
- Mishra, H. 1982: Balancing human needs and conservation in Nepal's Royal Chitwan National Park. *Ambio*, **11**: 246-251.

- Nepal Biodiversity Strategy 2002: <http://www.cbd.int/doc/world/np/np-nbsap-01-en.pdf>. (retrieved 28.3.2007).
- Sharma, B.K. 1996: An Assessment of Crop Damage by Wild Animals and Depredation of the Wildlife due to Activities of Local People in Koshi Tappu Wildlife Reserve. M.Sc. Thesis submitted to Central Department of Zoology, Tribhuvan University, Kiritipur, Kathmandu Nepal.
- Shrestha, B. 1994: Studies on Park-people Conflict, Investigation on Resolving Resources Conflict between Park Conservation and Adjoining Settlements in the North-eastern Boundary of RCNP. M. Sc. Thesis in Zoology, Tribhuvan University, Nepal.
- Studsord, J.E. and Wegge, P. 1995: Park People Relationships: A Case Study of Damaged Caused by Park Animals around the Royal Bardia National Park, Nepal. *Environment Conservation*, **22**: 132-142.
- WWF Nepal Program 2005: An Overview of Glaciers, Glacier Retreat, and Subsequent Impacts in Nepal, India and China. Program <http://www.raonline.ch/pages/pdf/himalglac05.pdf>. (retrieved 15.3.2007).
- WWF Nepal Strategic Plan 2006-2011 2006: http://assets.panda.org/downloads/strategic_plan_1_1.pdf (retrieved 18.3.2007).